

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Duke Energy Corporation

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Docket No. EC11-60-001

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Progress Energy, Inc.

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**REVISED COMPLIANCE FILING OF
DUKE ENERGY CORPORATION
AND PROGRESS ENERGY, INC.**

In compliance with: (1) the Commission's Order issued on September 30, 2011 (the "Merger Order"),¹ and the Commission's Order Rejecting the Applicants' October 17, 2011 Compliance Filing ("Compliance Order"),² Duke Energy Corporation ("Duke Energy") and Progress Energy, Inc. ("Progress Energy") (collectively, the "Applicants") submit their revised proposal for mitigating the market power concerns identified by the Commission in its Merger Order ("Revised Mitigation Proposal"). As explained below, the Revised Mitigation Proposal provides for permanent structural mitigation in the form of seven transmission expansion projects that fully address the concerns raised by the Commission in the Merger Order. The Applicants also are proposing interim mitigation, consisting of firm sales of capacity and energy, until the transmission expansion projects can be completed in approximately three years.

The Applicants request that the Commission issue an order approving the Revised Mitigation Proposal within 60 days after this filing, but in no event later than June 8, 2012, so that the Applicants can close their Merger prior to the July 8, 2012 termination date of their

¹ *Duke Energy Corp.*, 136 FERC ¶ 61,245 (2011).

² *Duke Energy Corp.*, 137 FERC ¶ 61,210 (2011).

Merger Agreement.³ This will allow the Applicants to commence providing merger-related benefits, including fuel, purchased power and related savings from the Applicants' joint dispatch of their Carolinas generation⁴ that will go directly to retail and wholesale requirements customers in North Carolina and South Carolina. In order to achieve this goal, the Applicants further request that the Commission immediately notice this filing, which has been served on all parties to this case.

I. SUMMARY OF REVISED MITIGATION PROPOSAL

In the Merger Order, the Commission ordered the Applicants to submit a proposal to mitigate the screen failures the Commission calculated, including screen failures shown on the plus 10 percent and minus 10 percent price sensitivities that the Applicants submitted. Merger Order at P 145. The Commission held that this mitigation could take the form of one or more of the following: (1) membership in a Regional Transmission Organization ("RTO"), (2) implementation of an independent coordinator of transmission ("ICT") arrangement, (3) generation divestiture, (4) virtual divestiture, and/or (5) transmission upgrades. *Id.* at P 146.

The prior mitigation proposal (the "Prior Proposal") submitted by the Applicants incorporated the fourth option presented by the Commission – virtual divestiture. The Commission held in the Compliance Order that, while virtual divestiture remains an appropriate

³ Applicants are in pending proceedings before the state commissions in North Carolina and South Carolina, seeking approval for the merger or merger-related agreements. Those proceedings have been left open for the respective commissions to review, if forthcoming, FERC orders approving the Revised Mitigation Plan, as well as the Joint Dispatch Agreement ("JDA") and Joint Open Access Transmission Tariff ("Joint OATT"). The closing of the merger depends on obtaining these remaining regulatory approvals, as well as final approval from this Commission. The Applicants' decision to close the Merger also will be subject to the Applicants' obtaining acceptable resolution of various state ratemaking issues.

⁴ Applicants concurrently are refiling the JDA and the Joint OATT, which the Commission rejected as moot in Dockets Nos. ER12-115 and ER12-116, without prejudice to the Applicants' right to refile.

mitigation option, the specific features of the Prior Proposal suffered from several deficiencies that caused that proposal to be unacceptable to the Commission.

Permanent Mitigation Proposal – Transmission Upgrades

In their Revised Mitigation Proposal, the Applicants now are adopting the fifth option described by the Commission in the Merger Order – transmission upgrades. These upgrades, which consist of seven projects with a total estimated cost of approximately \$110 million, constitute permanent structural mitigation that generally is favored over behavioral remedies. The Applicants' implementation and modeling of their proposed transmission upgrades is consistent with previous transmission upgrade proposals accepted by the Commission and should be approved here as well.

Dr. Hieronymus analyzed the effect of these transmission projects on the HHI increases shown in the Merger Order. His analysis shows that the expansions eliminate all screen failures except for one very small screen failure in the Summer Off-Peak season in the Progress Energy Carolinas, Inc. ("PEC") East Balancing Authority Area ("BAA") – an HHI increase of 101 points in a moderately concentrated market. This is a failure of only two points that would be eliminated if Duke Energy supplied only 5 MW less generation capacity to the PEC East market.

The Commission reiterated recently, when it decided not to amend its standards for evaluating horizontal market power, that screen failures alone do not necessarily represent a competitive harm when merger applicants point to factors demonstrating otherwise. *Analysis of Horizontal Market Power under the Federal Power Act*, 138 FERC ¶ 61,109 at P 37 (2012). Such factors are present here.

First, as described in more detail below, the increase in import capability resulting from the transmission projects provides access to alternative supplies that is significantly greater than

the amount of competition lost as a result of the Merger. In other words, the increase in import capability for the Duke Energy Carolinas, LLC ("DEC") BAA is significantly greater than the amount of Progress Energy capacity delivered into the DEC BAA prior to the Merger under the Applicants' Competitive Analysis Screen, and the increase in import capability for the PEC East BAA is significantly greater than the amount of Duke Energy capacity delivered into the PEC East BAA prior to the Merger. Increases in import capability that more than replace the amount of competitive supplies lost due to a merger fully restore the competitive options available to the wholesale customers in the BAAs and therefore provide adequate mitigation, as the Commission has found in the past. *See Oklahoma Gas & Electric Co.*, 108 FERC ¶ 61,004 at P 32 (2004) ("OGE"); *Oklahoma Gas & Elec. Co.*, 124 FERC ¶ 61,239 at P 49 (2008).

Moreover, the single minor screen failure of only one point occurs in an off-peak period when it is difficult to exercise market power. As such it does not represent a systematic market power concern. *See FirstEnergy Corp.*, 133 FERC ¶ 61,222 at PP 49-50 (2010); *Ohio Edison Co.*, 94 FERC ¶ 61,291 at 62,044 (2001). Consequently, the Applicants believe that, under applicable Commission precedent, the construction of the proposed transmission expansion projects constitutes adequate mitigation.

In the event, however, that the Commission nevertheless finds that it is not enough to completely replace, several times over, the competitive options lost as a consequence of the Merger, and that it is not enough to eliminate all but a single minor off-peak screen failure, the Applicants would agree to augment the Revised Mitigation Proposal with a mitigation proposal to mitigate the remaining small screen failure (the "stub mitigation proposal") – namely a set-aside of a portion of the expanded transmission capacity from the DEC BAA to the PEC East BAA. Under this proposal, only unaffiliated third parties would be permitted to reserve the set-

aside amount on a firm basis. This set-aside would ensure that the Applicants would not have access to the set-aside amount of transmission capacity into the PEC East BAA from the Duke BAA on a firm basis and thereby would fully mitigate the one small screen failure remaining after the transmission projects are completed.

Interim Mitigation Proposal – Firm Energy and Capacity Sales

As Mr. Waters and Mr. Ernst testify, the transmission projects proposed by the Applicants will take from two to three years to construct and place in service. In the meantime, the Applicants will make firm sales of capacity and energy as interim mitigation. These sales are structured so as to address the various concerns raised by the Commission in the Compliance Order with respect to the Prior Proposal, which also involved power sales as mitigation. Most notably, the Applicants have entered into must-deliver, must-take agreements with Cargill Power Markets, LLC ("Cargill"), EDF Trading North America, LLC ("EDF"), and Morgan Stanley Capital Group, Inc. ("Morgan Stanley").⁵ In so doing, the Applicants have directly addressed the Commission's concerns raised in the Compliance Order that the proposed energy sales might not be attractive to purchasers or that the Applicants would retain control over the capacity to the extent that it is not taken by purchasers. The interim mitigation sales proposed by the Applicants are consistent with other power sales arrangements approved by the Commission as interim mitigation, and should be approved here as well.

Independent Monitor

In the Compliance Order, the Commission criticized the Applicants for failing to have finalized arrangements for the independent monitoring of the Prior Proposal. Compliance Order at PP 87-90. Consequently, the Applicants have entered into an agreement with Potomac

⁵ See the power sales agreements attached as Exhibit C.

Economics, the current Independent Monitor of transmission for Duke Energy, to monitor compliance with: (1) the commitment to have interim mitigation power sales agreements in place until the transmission projects are completed; and (2) the transmission set-aside in the Revised Mitigation Proposal (to the extent that the Commission requires the set-aside). The specifics of the monitoring to be performed are described below in Section IV.

Supporting Materials

In support of their Revised Mitigation Proposal, the Applicants are providing extensive materials that demonstrate the effectiveness of the proposal. These materials include: (1) Testimony by Henry Edwin Ernst, Jr. and Samuel S. Waters, who are employed in the transmission planning departments of DEC and PEC, respectively. Mr. Ernst and Mr. Waters describe the proposed transmission projects and their effect on the Simultaneous Import Limit ("SIL") for the DEC and PEC East BAAs (Exhibit A); (2) Testimony of Dr. William H. Hieronymus, who calculates the effect of the permanent, interim, and stub mitigation on the Delivered Price Test ("DPT") and demonstrates that the Revised Mitigation Proposal eliminates all screen failures identified in the Merger Order (Exhibit B); (3) copies of the executed Power Sales Agreements ("PSAs") pursuant to which the Applicants will sell capacity and energy to Cargill, EDF and Morgan Stanley under their Interim Mitigation Proposal (Exhibit C); and (4) a copy of the executed agreement with Potomac Economics to provide independent monitoring of the Revised Mitigation Proposal (Exhibit D). These materials demonstrate that the Revised Mitigation Proposal represents a comprehensive mitigation package that fully resolves all of the market power concerns identified in the Merger Order on both a permanent and an interim basis and also addresses all implementation concerns raised by the Commission in the Compliance Order.

II. THE APPLICANTS' PERMANENT MITIGATION PROPOSAL MITIGATES THE MARKET POWER CONCERNS IDENTIFIED BY THE COMMISSION IN THE MERGER ORDER

A. The Applicants' Proposed Transmission Expansion Projects Provide Permanent Structural Mitigation

Summary of Proposed Projects

As noted above, the Applicants' permanent mitigation proposal consists of the construction of seven transmission expansion projects in order to increase transmission import capability into the DEC and PEC East BAAs. Transmission expansion was described in the Merger Order as an acceptable form of market power mitigation, Merger Order at P 146. The Commission also has accepted transmission expansion to mitigate merger-related market power in a number of other cases. *See Ameren Servs. Co.*, 101 FERC ¶ 61,202 at P 38 (2002); *OGE*, 108 FERC ¶ 61,004 at P 32; *Ameren Corp.*, 108 FERC ¶ 61,094 at P 50 (2004); *Westar Energy, Inc.*, 115 FERC ¶ 61,228 at P 81 (2006); *Oklahoma Gas & Elec. Co.*, 124 FERC ¶ 61,239 at PP 49-52 (2008). The projects proposed by the Applicants provide permanent structural mitigation of the market power concerns identified by the Commission in the Merger Order.

Included in Exhibit A to this filing are the Testimony of Mr. Ernst and the Testimony of Mr. Waters. Each has extensive experience and expertise in transmission matters and each is knowledgeable not only about the transmission systems of DEC and PEC, but also of the regional transmission systems that affect transmission imports into the DEC and PEC East BAAs. The testimony describes each of the seven proposed transmission projects. Mr. Ernst and Mr. Waters testify that, collectively, these projects will increase the SIL into DEC by 2440 MW in the summer and 1930 MW in the winter and into PEC East by 2225 MW in the summer and 1225 MW in the winter. Additionally, these projects will result in increased Available

Transfer Capacity ("ATC") on paths into DEC and PEC East. Based on preliminary estimates, the total cost of the seven projects is projected to be approximately \$110 million.

The proposed transmission expansion projects, which are described in detail by Mr. Ernst and Mr. Waters, are summarized on the following table:

Project	BAA	Estimated Cost⁶	Time to Construct
Antioch 500/230 kV - Replace two existing transformers with larger capacity transformers.	DEC	\$50 million	3 years
Lilesville-Rockingham 230 kV – Construct new third line.	PEC-East	\$15.7 million	2 years
Roxboro-E Danville 230 tie –add a series reactor to one Roxboro-E Danville 230 kV line and revise operating procedures. ⁷	PEC-East	\$6.6 million	2 years
Reconductor Kinston Dupont – Wommack 230 kV Line 6-1590 MCM.	PEC-East	\$18 million	2 years
Person - (DVP) Halifax 230 kV Line, reconductor DVP portion (20.04 Miles) of line.	PEC-East	\$16 million	2.5 years

⁶ These preliminary cost estimates are subject to change. The Applicants' commitment to build the projects is not affected by any changes in the cost estimates.

⁷ This project requires the cooperation of American Electric Power and the Person-Halifax and Wake-Carson projects require the cooperation of Dominion Virginia Power. The Applicants have discussed these projects with those two companies, and both have entered into memoranda of understanding under which these companies have agreed to negotiate binding agreements to undertake the projects. The Applicants expect to negotiate and complete binding agreements with those companies during the pendency of the Commission's review period to ensure the completion of these projects.

Wake – Carson 500 kV Line, replace existing wave traps with 4000 amp wave traps at both terminals and rework protective relaying.	PEC-East	\$1.5 million	< 2 years
Durham - E. Durham 230 kV line, Uprate CT Ratio to 3000 amps.	PEC-East	\$0.5 million	< 2 years

In addition to these seven projects, the Applicants also are accelerating the in-service date of PEC's already-planned Greenville – Kinston Dupont 230 kV Line from 2017 to 2015.⁸

As Mr. Waters and Mr. Ernst testify, the transmission projects proposed by the Applicants are expected to take from two to three years to construct and place in service. In the event that the transmission projects are not all placed in service by June 1, 2015, the Applicants commit to continuing interim mitigation sales as described in more detail below until such time as the projects have been placed in service.

It is Not Foreseeable and Reasonably Certain that the Proposed Transmission Projects Would Be Constructed Absent the Merger

In some of its prior cases involving transmission expansion as mitigation of merger-related market power, the Commission has required that merger applicants demonstrate "whether or not the proposed upgrade was foreseeable and reasonably certain." *Oklahoma Gas & Electric Co.*, 105 FERC ¶ 61,297 at P 32 (2003). *See also Ameren Corp.*, 108 FERC ¶ 61,094 at P 50. The Commission held in these cases that, if the upgrade is foreseeable and reasonably certain to be constructed without the merger, then it may not be counted as merger-related market power mitigation. *Id.*

⁸ The Greenville – Kinston Dupont 230 kV Line does not by itself provide any increase in the DEC or PEC East SILs. It was planned by PEC for reliability purposes, not to increase the PEC East import capability. However, it is necessary for the line to be in service by 2015 in order for the last four projects in the above list to increase the SIL of the PEC East BAA in the manner described by Mr. Waters.

Mr. Ernst and Mr. Waters address this issue in their testimony. As they explain, none of the seven projects is currently included in either of the Applicants' Transmission Plans. Although some of these projects have been studied in the past as part of the regional planning process, there currently is no plan to construct any of them absent the Merger. It clearly is not foreseeable and reasonably certain that, absent the Merger, these projects would be constructed in the next two to three years, as the Applicants now propose.

The Transmission Projects Deconcentrate the Market and Eliminate All But a Single Minor Off-Peak Screen Failure

In his testimony, attached as Exhibit B, Dr. Hieronymus presents his analysis of the effects of the transmission expansion projects. The results of Dr. Hieronymus' analysis are summarized on the following two tables. Table 1 shows the post-transmission expansion results for the DEC BAA for the base case and two sensitivities identified by the Commission in the Merger Order:

Table 1: DEC Post-Mitigation Screen Results (Available Economic Capacity)⁹

	Base Prices				Price increase 10%				Price decrease 10%			
	Pre-Merger HHI	Post-Mitigation			Pre-Merger HHI	Post-Mitigation			Pre-Merger HHI	Post-Mitigation		
		Market Share	HHI	HHI Chg.		Market Share	HHI	HHI Chg.		Market Share	HHI	HHI Chg.
S_SP1	1126	17.2%	630	(496)	1131	17.7%	632	(499)	786	1.8%	491	(295)
S_SP2	2277	34.3%	1355	(921)	2332	36.6%	1520	(812)	1488	20.8%	725	(763)
S_P	1815	25.8%	861	(954)	2722	37.4%	1542	(1,180)	1820	25.9%	881	(939)
S_OP	3434	47.8%	2391	(1,043)	3475	48.4%	2442	(1,032)	2027	33.1%	1288	(739)
W_SP	405	1.7%	393	(12)	554	11.4%	425	(129)	400	0.0%	415	15
W_P	1091	22.8%	754	(338)	1090	23.1%	745	(345)	516	11.3%	441	(75)
W_OP	1963	35.6%	1418	(545)	2014	36.9%	1515	(500)	1530	29.7%	1087	(443)
SH_SP	1472	36.4%	1475	3	1779	38.5%	1780	1	393	0.0%	404	10
SH_P	460	0.6%	496	37	464	2.9%	450	(14)	432	0.9%	351	(81)
SH_OP	371	0.9%	403	33	642	20.7%	783	141	405	0.1%	388	(17)

⁹ Taken from Exhibit WHH-5 of Dr. Hieronymus' Testimony.

As this table shows, the transmission expansion projects completely mitigate the screen failures in the DEC BAA identified by the Commission in the Merger Order. Indeed, in most periods, including all periods where there previously were screen failures, the expansion results in a significant *de-concentration* of the market as compared to the pre-merger concentration. This is true under the Base Case as well as the plus 10% and minus 10% price sensitivities required by the Commission.

Table 2 shows the post-expansion results for the PEC East BAA:

Table 2: PEC East Post-Mitigation Screen Results (Available Economic Capacity)¹⁰

	Base Prices				Price increase 10%				Price decrease 10%			
	Pre-Merger HHI	Post-Mitigation			Pre-Merger HHI	Post-Mitigation			Pre-Merger HHI	Post-Mitigation		
		Market Share	HHI	HHI Chg.		Market Share	HHI	HHI Chg.		Market Share	HHI	HHI Chg.
S_SP1	524	4.2%	446	(79)	465	5.6%	415	(49)	567	1.7%	490	(77)
S_SP2	590	18.2%	585	(4)	699	22.8%	739	40	485	4.4%	423	(62)
S_P	368	8.5%	392	24	729	27.8%	972	242	339	8.0%	372	33
S_OP	1301	35.0%	1402	101	1379	35.1%	1402	22	1198	24.7%	856	(342)
W_SP	466	2.1%	389	(77)	394	1.8%	414	21	524	0.0%	475	(49)
W_P	336	14.2%	445	110	353	13.9%	451	99	474	4.2%	448	(26)
W_OP	568	26.3%	891	324	598	26.2%	899	302	495	19.5%	635	139
SH_SP	413	7.2%	436	23	443	9.3%	424	(19)	375	0.0%	416	41
SH_P	447	0.8%	514	67	460	10.1%	459	(1)	423	1.0%	417	(6)
SH_OP	381	4.2%	419	39	822	26.2%	911	88	375	0.5%	362	(14)

This table shows that, with the proposed mitigation, the screen failures identified by the Commission in the PEC East BAA are eliminated in all three market price scenarios, except for the Summer Off-Peak in the Base Case. In this one period, there is an HHI increase of 101 and a moderately concentrated HHI level, which represents a screen failure of only two points. This very small screen failure does not represent a competitive concern, as described in Section II.B below.

¹⁰ Taken from Exhibit WHH-6 of Dr. Hieronymus' Testimony.

B. The Single Two Point Screen Failure Remaining After the Transmission Expansion Projects Does Not Reflect a Competitive Concern

The SIL Increase Resulting From the Transmission Projects is Greater than the Amount of Competitive Supplies Lost as a Result of the Merger

The Commission previously has held that SIL increases greater than the amount of competitive supplies lost due to the merger fully restore the competitive options available to the wholesale customers in the BAAs and therefore provide adequate mitigation. The reasons for this are explained in detail in the *OGE* case described above:

[T]he offsetting of the 400 MW supply by access to an equivalent amount of alternative supply (*i.e.*, the 600 MW Bridge) will address the concerns raised by the horizontal screen failures. In other words, *by providing even more competing supply than is eliminated by the Transaction, the OG&E Offer of Settlement addresses the harm to competition resulting from increases in horizontal market power due to the Transaction.* As a result of the 600 MW Bridge, any attempt by OG&E to exercise horizontal market power (*i.e.*, increase price by reducing supply) would be no more successful than it would have been absent the Transaction, *because the reduction in supply is offset by an alternate supply that customers can reach to avoid the attempted price increase.*

OGE, 108 FERC ¶ 61,004 at P 32 (emphasis added). The Commission reconfirmed this reasoning in a subsequent case involving another acquisition by OGE. *See Oklahoma Gas & Elec. Co.*, 124 FERC ¶ 61,239 at P 49 ("proposed measures adequately mitigate the potential harm to competition resulting from the Transaction by increasing the amount of import capability such that the increased amount of competing supply offsets the elimination of a competitor.").

The transmission expansions proposed by the Applicants meet this standard. Under the analyses of the DEC and PEC East BAAs relied on by the Commission in its Merger Order to find screen violations, the largest amount of Progress Energy capacity delivered to the DEC BAA before the Merger was 318 MW (summer). *See* Exhibit B to Applicants' August 29, 2011

Answer.¹¹ By comparison, as Exhibit WHH-7 to Dr. Hieronymus' testimony shows, the increase in "rival capacity" (i.e. the amount of increased capacity not allocated to Duke Energy) in the DEC BAA is between 1,900 MW and 2,400 MW in the summer. This means that the summer increases in access to competing supply are from approximately six to eight times greater than the amount of Progress Energy AEC available to wholesale customers in the DEC BAA prior to the Merger.¹² The Revised Mitigation Proposal thus provides *significantly* "more competing supply than is eliminated by the Transaction" in the DEC BAA, and as a consequence that proposal "addresses the harm to competition resulting from increases in horizontal market power due to the Transaction." *OGE*, 108 FERC ¶ 61,004 at P 32.

Similarly, the analysis relied on by the Commission in the Merger Order showed at most 543 MW of Duke Energy AEC delivered into the PEC East BAA in the summer. *See* Exhibit B to Applicants' August 29, 2011 Answer. Dr. Hieronymus' Exhibit WHH-7 shows that the transmission expansion increases access to rival capacity in the summer ranging from 1,300 MW and 2,100 MW. This results in increases in access to competing supply in the PEC East BAA that are approximately two to four times greater than the amount of Duke Energy supplies potentially lost as a competitive alternative as a result of the Merger. Consequently this expansion adequately addresses any competitive harm resulting from the Merger.

¹¹ This Exhibit B was cited by the Commission in the Merger Order as the source of its calculations showing screen failures. *See* Merger Order at P 134, Table 1.

¹² The equivalent numbers for winter are 262 MW for the largest amount of Progress Energy capacity delivered to the DEC BAA before the Merger, relative to an increase in access to rival capacity in the winter of between 1,700 MW and 2,000 MW in the winter.

The Single Remaining Two Point Off-Peak Screen Failure in PEC East Does Not Represent a Systematic Market Power Concern

In addition to the fact that the transmission expansion projects result in SIL increases several times larger than the competing supplies lost as a result of the Merger, the single remaining two point off-peak screen failure in PEC East does not represent a systematic market power concern. As the Commission has long recognized, screen failures do not always represent a valid competitive concern. Indeed, as recently as February 16, 2012, the Commission emphasized this fact when it held that it would not revise its current standards for evaluating horizontal market power in merger proceedings:

Not only has the Commission stated that it will look beyond the HHI screens, the Commission has done so in practice. For example, in *FirstEnergy Corp.*, the Commission found that a proposed merger would not have an adverse effect on horizontal competition despite three screen failures because these failures occurred in off-peak periods during which the applicants had a relatively low market share. In addition, in response to commenters that argued that the applicants' proposal would provide the applicants with the ability and incentive to raise prices, the Commission considered the fact that any withholding strategy could be detected by the relevant market monitor and that the Commission had previously found that companies would not be able to profitably withhold output where the generating units at issue are baseload units. In *National Grid*, the Commission found that a proposed transaction would not have an adverse impact on competition, despite the presence of screen failures, because the applicants lacked the ability to withhold output due to provider of last resort obligations and to the applicants' obligations under long-term power sale agreements in the relevant geographic markets.

Analysis of Horizontal Market Power under the Federal Power Act, 138 FERC ¶ 61,109 at P 37 (footnotes omitted). See also *Exelon Corp.*, 138 FERC ¶ 61,167 at P 106 (2012) (Baseload units "are poorly suited to take advantage of a withholding strategy because they are difficult to ramp up or down.").

Such is the case with respect to the single, very small, calculated screen failure Dr. Hieronymus shows remaining in the PEC East BAA after the significant SIL increases achieved by the Applicants' proposed transmission projects. As the Commission reaffirmed in its

Supplemental Merger Policy Statement, when there are HHI screen failures, "the Commission's analysis focuses on the merger's effect on the merged firm's *ability* and *incentive* to withhold output in order to drive up the market price." *FPA Section 203 Supplemental Policy Statement*, FERC Stats. & Regs. ¶ 31,253 at P 60 (2007) (emphasis in original).

Here, where the transmission expansion projects increase import capability by more than four times the amount of competitive supplies lost as a result of the Merger, the transmission projects will have eliminated any concern that the Merger will increase the Applicants' *ability* "to withhold output in order to drive up the market price." *Id.* The single screen failure calculated by Dr. Hieronymus that remains after the transmission expansion projects are completed therefore does not raise a competitive concern.

Furthermore, as Dr. Hieronymus' testimony explains, the single two point screen failure remaining in the PEC East BAA after the transmission projects go into service is very small and would be eliminated if Duke Energy supplied only 5 fewer MW of generation capacity to the PEC East market. Even more significant, the screen failure occurs in the Summer Off-Peak period and only in the Base Case. The Commission has held in the past that no competitive concerns were raised even when there were three screen failures occurring in off-peak periods (as opposed to the single off-peak screen failure here), because of the difficulty of withholding the baseload generation that operates in off-peak conditions. *See FirstEnergy Corp.*, 133 FERC ¶ 61,222 at PP 49-50; *Ohio Edison Co.*, 94 FERC ¶ 61,291 at 62,044. Indeed, in its recent order declining to change its standards for evaluating horizontal market power issues in its merger proceedings, the Commission cited favorably to the *FirstEnergy* decision as representing an appropriate analysis of whether screen failures represent actual competitive concerns. *Analysis of Horizontal Market Power under the Federal Power Act*, 138 FERC ¶ 61,109 at P 37.

Similarly, the single off-peak screen failure that remains here after the proposed transmission projects are placed in service does not represent a competitive concern.

C. If Required by the Commission, the Applicants Will Implement Stub Mitigation for the PEC East BAA in the Form of a Transmission Set-Aside

Notwithstanding the evidence that the remaining screen failure does not represent a valid competitive concern, the Applicants' Revised Mitigation Proposal includes a stub mitigation proposal that would go into effect only in the event that the Commission determines that any such mitigation should be required. If the Commission deems it necessary, the Applicants propose to establish a transmission set-aside of 25 MW of firm transmission capacity from the DEC BAA to the PEC East BAA in the Summer Off-Peak period. Neither the Applicants nor any of their affiliates would be able to reserve this 25 MW set-aside on a firm basis.

Under Section 33.3(c)(4)(i)(C) of the Commission's Merger Regulations, the allocation of transmission capacity on interfaces between BAAs must recognize existing firm transmission rights that limit the availability of the interface for use to deliver capacity into the BAA. The Competitive Analysis Screen then must allocate capacity subject to existing rights to the owners of the firm transmission rights and the remaining unreserved capacity is allocated among all potential suppliers on an appropriate basis – the Merger Regulations do not specify the allocation method required for unreserved import capacity, but in the Merger Order the Commission accepted the Applicants' pro rata allocation approach.

The intent of the transmission set-aside alternative is to create the equivalent of a firm transmission right that will be reflected as being unavailable to the Applicants in the allocation of capacity from the DEC BAA to the PEC East BAA in performing the competition analysis. The Applicants' transmission set-aside proposal will ensure that the Applicants would be unable to enter into firm reservations for the capacity subject to the set-aside. Consequently, for purposes

of conducting the Competitive Analysis Screen, it would not be appropriate to allocate any of the set-aside import capacity to the Applicants, but instead that capacity would be allocated pro rata among all potential suppliers that are unaffiliated with the Applicants.

Specifically, the Applicants propose that, after the transmission expansion projects are completed, they will set aside 25 MW of import capacity on the DEC to PEC East interface by complying with the following restrictions at all times during the Summer Off-Peak period:

1. If new third party firm transmission reservations¹³ are greater than or equal to the 25 MW set-aside amount, then the Applicants may reserve on a firm basis up to the then posted available firm transmission capacity.
2. If new third party firm transmission reservations are less than the 25 MW set-aside amount, then the Applicants shall not reserve on a firm basis any more than the amount of transmission capacity then posted as available on that path for that time which exceeds: (a) 25 MW; less (b) the sum of all new firm third party transmission reservations.

The Applicants will not claim any kind of native load or other priority over the 25 MW of set-aside capacity. To the extent that the 25 MW of capacity is not reserved by third parties on a firm basis, the Applicants, and all other market participants, will be able to use the capacity in the Summer Off-Peak on a non-firm basis under the same first-come, first-served rules. However, a third party can always reserve import capacity on the set-aside portion of the interface on a firm basis and displace any non-firm use of the set-aside portion of the interface by the Applicants. This transmission set-aside would remain in effect unless and until the Commission rules in the future that it no longer is required.

The Applicants believe that this commitment is appropriate for treating the interface capacity as unavailable to the Applicants for purposes of the Competitive Analysis Screen.

¹³ References to new third party firm transmission reservations in this paragraph do not include the amount of existing firm reservations that have been made by third parties and that already have been allocated to third parties under the Competitive Analysis Screen performed by Dr. Hieronymus.

Because the Applicants would not be able to make a firm reservation for the capacity that would be set aside, third parties will be entitled to use the entire 25 MW of transmission capacity to deliver their own supplies, whether from owned generation capacity or purchases, into the PEC East BAA. Consequently, it is appropriate, for purposes of the Competitive Analysis Screen, to allocate that 25 MW of import capacity pro rata among third parties, and not to the Applicants. All remaining unreserved capacity would continue to be allocated on a pro rata basis to all parties, including the Applicants.

The Commission's Merger Regulations do not directly address this set-aside proposal. However, Section 33.3(c)(4)(i)(D)(2) of the Merger Regulations, which applies to the allocation of capacity to internal interfaces – as opposed to the allocation of capacity between BAAs, as is the case here – does specifically allow merger applicants that have "committed a portion of the interface capacity to third parties" to avoid the Commission's otherwise applicable rule that all of the capacity of the internal interface be allocated to the applicants. The Applicants' commitment here to commit a portion of the interface capacity to third parties similarly should allow the Applicants to avoid the otherwise applicable rule that the unreserved capacity be allocated pro rata.¹⁴

The Applicants have engaged Potomac Economics as an Independent Monitor to monitor compliance with this requirement and to file periodic reports at the Commission detailing the extent of the Applicants' compliance. The Independent Monitoring provisions of the Revised Mitigation Proposal are described in more detail in Section IV below.

¹⁴ The Applicants also observe that the Commission has accepted redispatch commitments to be used to affect the way that allocations of transmission capacity are modeled in merger-related competition analyses. *See OGE*, 108 FERC ¶ 61,004 at P 34; *Ameren Services Co.*, 101 FERC ¶ 61,202 at P 32.

Dr. Hieronymus also has conducted an analysis of the effects of the transmission set-aside and described these effects in his testimony. This analysis shows that, after consideration of the transmission set-aside, the Summer Off-Peak screen violation in the PEC East BAA is eliminated.

III. THE APPLICANTS' INTERIM MITIGATION PROPOSAL FULLY MITIGATES THE SCREEN FAILURES IDENTIFIED BY THE COMMISSION IN THE MERGER ORDER UNTIL THE TRANSMISSION PROJECTS ARE PLACED IN SERVICE

The Applicants recognize that interim mitigation will be required until such time as the transmission expansion projects described above are placed in service. The Applicants propose to implement this interim mitigation through firm sales of capacity and energy, described in detail below. Although in the Compliance Order the Commission rejected as inadequate the Applicants' proposed energy sales in the Prior Proposal, the Commission emphasized that it would accept power sales as mitigation if the sales satisfy the criteria spelled out in the Compliance Order. Compliance Order at P 91 and note 165.¹⁵ Indeed, the Commission accepted such a proposal in its recent order approving the merger between Exelon Corporation and Constellation Energy. *See Exelon Corp.*, 138 FERC ¶ 61,167 at P 101.

The firm energy and capacity sales that the Applicants are proposing here are materially different from those in the Applicants' Prior Proposal, and are consistent with the requirements spelled out in the Compliance Order. The Applicants have entered into firm power sales agreements ("PSAs") with Cargill, EDF, and Morgan Stanley, which are being filed for the Commission's approval under FPA Section 205 simultaneously with this filing. Copies of these

¹⁵ Moreover, FERC stated in the Merger Order that virtual divestiture is an acceptable form of mitigation. Merger Order at PP 1, 146.

PSAs are included in Exhibit C. The material provisions of the PSAs, which use the industry-standard EEI form, as modified by the PSAs, are as follows:

- Energy will be sold on a firm basis in all hours of those seasons when mitigation is required (summer and winter for DEC, summer for PEC). The amounts sold in on-peak and off-peak periods will be sufficient to fully mitigate the screen failures calculated by the Commission in the Merger Order, as demonstrated in Dr. Hieronymus' testimony described below. These amounts are as follows:
 - In the DEC BAA:
 - Summer Peak – 150 MW.
 - Summer Off-Peak – 300 MW.
 - Winter Peak – 25 MW
 - Winter Off-Peak – 225 MW
 - In the PEC East BAA
 - Summer Peak – 325 MW
 - Summer Off-Peak – 500 MW
- The sales will be divided among the purchasers as follows:
 - Cargill – all of the energy and capacity sold in the DEC BAA, and 100 MW in the Summer Peak and 100 MW in the Summer Off-Peak Periods for the PEC East BAA
 - EDF - 100 MW in the Summer Peak and 100 MW in the Summer Off-Peak Periods for the PEC East BAA
 - Morgan Stanley – 125 MW in the Summer Peak and 300 MW in the Summer Off-Peak Periods for the PEC East BAA
- The energy will be sold on a "must take" basis, *i.e.* the purchaser must take the full contract amount in all hours, subject to interruption only on *force majeure* grounds, which are specified in the PSAs.
- The energy will be sold at a specified price, based on a fixed heat rate and the natural gas price reported in *Platts Gas Daily* for Transco Zone 5. The heat rates will be differentiated by on-peak and off-peak periods. The heat rates are based on the heat rates of units that will address the screen failures, as Dr. Hieronymus explains in more detail in his testimony. These heat rates are as follows:
 - Summer Peak – 10.0 MMBtu/MWh.
 - Summer Off-Peak – 7.0 MMBtu/MWh.
 - Winter Peak – 8.95 MMBtu/MWh.
 - Winter Off-Peak – 7.0 MMBtu/MWh.
- The capacity prices were negotiated between the Applicants and the purchasers, at prices that are well below DEC's and PEC's cost-based capacity prices.
- There are no restrictions on the use of energy by the purchasers after it is purchased.

- Any interruption of deliveries of energy by DEC or PEC will result in the payment of liquidated damages unless that interruption is excused on *force majeure* grounds.
- Sales under the PSAs will commence at the beginning of the first day after the Merger is closed.¹⁶ The term of each of PEC's PSAs will extend through August 31, 2014. The term of DEC's PSA will extend through February 28, 2015. These dates ensure that the interim mitigation will be in place until the transmission expansion projects are expected to be completed.

These terms address the concerns identified by Commission in the Compliance Order.

The Commission's conclusion was that the Prior Proposal was deficient because "the terms of the proposed sales would make the AEC Energy difficult to market and would not provide an attractive product for the already limited pool of potential buyers." Compliance Order at P 80.

The attractiveness of the product offered was important under the Prior Proposal because under the Prior Proposal the Applicants would have retained control over the AEC Energy if it was not sold. The Commission found that the Prior Proposal therefore did not adequately transfer control over the capacity necessary to mitigate the screen failures identified in the Merger Order.

The Revised Mitigation Proposal addresses this concern head on in two important respects. First, by identifying the purchasers and entering into contracts with them prior to filing the Revised Mitigation Proposal, the Applicants have directly addressed the concern that the Applicants will have difficulty finding a purchaser. Second, the must take feature of the PSAs ensures that the energy will be purchased subject only to the occurrence of *force majeure* events and will be beyond the Applicants' control.

¹⁶ Under the terms of the PSAs, service must commence by August 1, 2012, or the PSAs will terminate. This termination date was required by the purchasers as a condition of entering into the PSAs, in order to give them protection against being required to take service for an indefinite period of time. Termination on this ground may not occur until after the July 8, 2012 termination date of the Applicants' Merger Agreement, and thus the Applicants expect that the PSAs will not terminate unless the Merger also has been terminated. In the event that the Merger cannot be closed prior to July 8, 2012 and Applicants decide to extend the termination date under the Merger Agreement and close the Merger after August 1, 2012, the Applicants commit that they will not close the Merger before putting in place PSAs with materially the same terms and conditions.

The Applicants' identification of the purchasers in this Revised Mitigation Proposal also addresses the Commission's criticism of the Applicants' modeling of the Prior Proposal, in which the Applicants had assumed that two new entrants would purchase the energy. Compliance Order at PP 68-74. By identifying the actual purchasers prior to filing the Revised Mitigation Proposal, the Applicants have been able to perform their modeling based on the specifics of the actual purchasers, and thus have shown definitively that the amount of sales resolves all screen failures.

The sales in the Revised Mitigation Proposal also are designed to address other specific shortcomings associated with the energy sales Prior Proposal that the Commission identified in the Compliance Order:

- (1) The Compliance Order criticized the restrictions on eligible purchasers in the Prior Proposal that required the sales be used to serve load in the DEC and PEC East BAAs. Compliance Order at P 76. The Revised Mitigation Proposal contains no such restrictions.
- (2) The Compliance Order asserted that there was a lack of certainty as to the availability of energy under the Prior Proposal. Compliance Order at P 80. Under the Revised Mitigation Proposal the energy will be made available in all hours in which it is required to be sold.
- (3) The Compliance Order found that there was not sufficient detail provided regarding the price of the energy to be sold under the Prior Proposal. Compliance Order at P 83. Under the Revised Mitigation Proposal, the price of capacity has been fixed in the contract and the price of energy is easily calculable based on the specified heat rate and the published natural gas price index.
- (4) The Compliance Order found that the provisions in the Prior Proposal allowing the Applicants to interrupt deliveries for reliability reasons lacked sufficient detail as to when interruptions would be allowed. Compliance Order at P 84. Under the Revised Mitigation Proposal, any interruption of deliveries of energy by DEC or PEC will result in the payment of liquidated damages unless that interruption is excused on specified force majeure grounds.

- (5) The Compliance Order found that the Applicants did not justify the eight-year term of the sales under the Prior Proposal. Compliance Order at P 86. Under the Revised Mitigation Proposal, the interim sales will be made until the transmission expansions that provide permanent mitigation are placed in service.
- (6) The Compliance Order found that the Applicants did not provide enough detail about the independent monitor that would have overseen the administration of the energy sales under the Prior Proposal. Compliance Order at PP 87-90. Under the Revised Mitigation Proposal, the Applicants have executed a contract with Potomac Economics to be the Independent Monitor, as described in more detail in Section IV below.
- (7) The Compliance Order criticized the Prior Proposal for failing to provide for the sale of AEC Energy regardless of the price offered by purchasers. Compliance Order at P 81 n.147. By identifying a purchaser prior to filing the Revised Mitigation Proposal, this criticism has been mooted.

Consequently, the proposed firm sales of capacity and energy as interim mitigation address the deficiencies identified by the Commission in the Compliance Order and should be acceptable to the Commission.

Dr. Hieronymus has analyzed the proposed interim sales and their effect on the screen failures calculated by the Commission in the Merger Order. As he explains in his testimony, the sales fully mitigate all such screen failures.

Finally, the Applicants have structured the duration of the PSAs so that it should not be necessary to extend the PSAs or enter into new PSAs. The Applicants have estimated that all of the transmission projects described above can be completed within three years which is approximately June 1, 2015, the commencement of the Summer Period when mitigation is required under the Merger Order. The PSAs applicable to the PEC East BAA all extend through the end of the Summer Period for 2014, which is the last Period in which mitigation is required in PEC-East before the permanent mitigation is projected to take effect, while the DEC PSA extends through the end of the Winter Period for 2014-2015, which is the last Period in which mitigation is required in DEC before permanent mitigation is projected to take effect.

As long as all of the transmission projects are completed by June 1, 2015, as estimated, it therefore will not be necessary for the Applicants to extend the interim mitigation into the summer of 2015, which begins June 1. However, the Applicants acknowledge the possibility that the transmission projects may not all be placed in service prior to June 1, 2015. In that event, the Applicants will either renew the PSAs or else enter into new PSAs with alternative purchasers on materially the same terms and conditions, regardless of the price offered by the purchaser for the capacity being sold. Compliance with this commitment will be monitored by the Independent Monitor, as described in Section IV.

IV. THE APPLICANTS HAVE PROVIDED FOR ADEQUATE INDEPENDENT MONITORING OF THEIR REVISED MITIGATION PROPOSAL

Once the Merger is completed, two aspects of the Revised Mitigation Proposal will be subject to monitoring by Potomac Economics as an independent monitor. First, Potomac Economics will monitor whether the PSAs submitted as part of the Revised Mitigation Proposal remain in effect prior to the completion of the transmission expansion projects and, if any of the PSAs has been terminated or expires prior to completion of the transmission projects, Potomac Economics will monitor whether such PSA has been replaced with a new PSA under materially the same terms and conditions. Second, to the extent that the Commission requires a transmission set-aside as stub mitigation, Potomac Economics will monitor the Applicants' compliance with the transmission set-aside requirements.

Attached as Exhibit D is a copy of the executed contract with Potomac Economics pursuant to which it will conduct its independent monitoring function.¹⁷ Included in this contract are the following terms:

¹⁷ The Applicants are not filing the pricing provisions of the contract, which are contained in Attachment B of the contract.

- (1) Within 30 days following the conclusion of each winter and summer period,¹⁸ Potomac Economics will provide to the Applicants and file with the Commission¹⁹ a report certifying the Applicants' compliance with their commitments and, to the extent there may be any incidents of non-compliance, describing and analyzing such incidents.²⁰
- (2) To the extent that Potomac Economics believes at any time that the Applicants are not in compliance with the commitments being monitored, Potomac Economics will immediately inform the Applicants and, after discussing the circumstances with the Applicants, promptly make a filing with the Commission explaining its reasons for reaching this conclusion.
- (3) The Applicants will provide Potomac Economics with all information reasonably requested by Potomac Economics to fulfill its monitoring function. All confidential or proprietary information of the Applicants will be treated as confidential by Potomac Economics, which will take steps to protect its confidentiality.

By providing the above detail, along with a copy of the contract that the Applicants have executed with Potomac Economics, the Applicants have demonstrated that their Revised Mitigation Proposal will be adequately monitored by an independent monitor.

¹⁸ Once the transmission expansion projects are placed in service, Potomac Economics will file its report only following the conclusion of the summer period, which is the only period in which stub mitigation is required.

¹⁹ Additionally, Potomac Economics will submit copies of both the confidential and non-confidential versions of the report to the North Carolina Utilities Commission and the Public Service Commission of South Carolina.

²⁰ To the extent that the report contains any confidential data, a redacted publicly available version also will be filed.

CONCLUSION

As explained above, the Applicants' Revised Mitigation Proposal fully addresses the market power concerns identified in the Merger Order on both a permanent and an interim basis. Consequently, the Applicants request that the Commission approve this filing within 60 days but in no event later than June 8, 2012 for the reasons set forth above.

Respectfully submitted,

/s/ Mike Naeve

Catherine S. Stempien
Senior Vice President, Legal
Paul Kinny
Associate General Counsel
Duke Energy Corporation
550 South Tryon Street
Charlotte, NC 28202

Counsel for Duke Energy Corporation

Kendal Bowman
Associate General Counsel
Danielle T. Bennett
Associate General Counsel
Progress Energy, Inc.
410 South Wilmington Street
Raleigh, NC 27601

Counsel for Progress Energy, Inc.

Mike Naeve
William S. Scherman
Matthew W.S. Estes
Kathryn Kavanagh Baran
Skadden, Arps, Slate,
Meagher & Flom LLP
1440 New York Avenue, N.W.
Washington, DC 20005

*Counsel for Duke Energy Corporation and
Progress Energy, Inc.*

March 26, 2012

CERTIFICATE OF SERVICE

I hereby certify the foregoing Compliance Filing was served this 26th day of March, 2012, on the official service list maintained by the Secretary in this proceeding.

/s/Matthew W.S. Estes
Skadden, Arps, Slate, Meagher
and Flom, LLP
1440 New York Ave, N.W.
Washington, DC 20005

EXHIBIT A

TESTIMONY OF HENRY EDWIN ERNST, Jr.

TESTIMONY OF SAMUEL S. WATERS

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Duke Energy Corporation)	
)	Docket No. EC11-60-001
Progress Energy, Inc.)	

**PREPARED DIRECT TESTIMONY OF
HENRY EDWIN ERNST, JR.
ON BEHALF OF
DUKE ENERGY CORPORATION**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 **A.** My name is Henry Edwin Ernst, Jr. My business address is 526 South Church St.,
3 Charlotte, NC 28202.

4 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

5 **A.** I am testifying on behalf of Duke Energy Corporation (“Duke Energy”).

6 **Q. WHAT IS YOUR POSITION WITH DUKE ENERGY?**

7 **A.** I am Director, Transmission Planning for Duke Energy Carolinas, LLC (“Duke
8 Energy Carolinas” or “DEC”).

9 **Q. PLEASE BRIEFLY DESCRIBE YOUR DUTIES AS DIRECTOR,**
10 **TRANSMISSION PLANNING.**

11 **A.** My duties include directing and supervising the long-range planning for DEC’s
12 transmission system in North Carolina and South Carolina to assure adequate

1 reliability, reviewing generation interconnection and transmission service
2 requests, conducting long-term system impact and other studies under DEC's
3 Open Access Transmission Tariff ("OATT"), and conducting joint planning
4 studies with other load serving entities in North Carolina through the North
5 Carolina Transmission Planning Collaborative ("NCTPC") as well as with other
6 utilities in the southeast and the Eastern Interconnection.

7 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

8 **A.** I graduated from North Carolina State University with a Bachelor of Science
9 degree in Electrical Engineering in 1975, from Rensselaer Polytechnic Institute
10 with a Masters of Engineering in Electric Power Engineering in 1976, and from
11 the University of North Carolina at Charlotte with a Masters of Business
12 Administration degree in 1981.

13 **Q. WHAT IS YOUR PROFESSIONAL EXPERIENCE?**

14 **A.** Since graduation from Rensselaer Polytechnic Institute in 1976, I have been
15 employed with Duke Energy in a variety of positions in transmission system
16 operations and planning, as well as demand side management and marketing. I
17 am a licensed engineer in North Carolina and South Carolina.

18 **Q. HAVE YOU TESTIFIED BEFORE ANY REGULATORY AUTHORITIES?**

1 **A.** Yes. I filed testimony before this Commission in Docket No. ER11-2895 and I
2 have testified before the North Carolina Utilities Commission and the Public
3 Service Commission of South Carolina.

4 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
5 **PROCEEDING?**

6 **A.** My testimony will provide a description of the DEC transmission system and the
7 transmission planning process for that system, and will explain the transmission
8 projects that DEC will undertake to enhance system import capability and to
9 increase access for wholesale suppliers to markets inside the DEC and PEC
10 balancing authority areas (“BAAs”). The specific projects described, along with
11 the Progress Energy Carolinas, Inc. (“PEC”) projects described in Mr. Waters’
12 testimony, will serve as permanent mitigation for the market screen failures
13 described in Dr. Hieronymus’ testimony.

14 **Q. PLEASE DESCRIBE THE EXISTING DUKE ENERGY CAROLINAS**
15 **TRANSMISSION SYSTEM.**

16 **A.** Duke Energy Carolinas provides retail electric service in the Piedmont/western
17 areas of North Carolina and South Carolina. A map of DEC and PEC-East and
18 PEC-West service areas and adjacent systems is attached hereto as Exhibit No.
19 DEC-2 (the same map is also attached to Mr. Waters’ testimony on behalf of
20 Progress Energy as Exhibit No. PEC-2). Duke Energy Carolinas’ transmission
21 system consists of approximately 13,100 circuit miles of transmission at voltage

1 levels of 44 kV, 66 kV, 100 kV, 138 kV, 161 kV, 230 kV and 500 kV. The DEC
2 BAA has 21 interconnections with nine neighboring BAAs. The neighboring
3 BAAs are: PEC-East, PEC-West, PJM-American Electric Power (“AEP”),
4 Southern Company, Yadkin, South Carolina Public Service Authority, South
5 Carolina Electric and Gas, Southeastern Power Administration, and Tennessee
6 Valley Authority. DEC provides both point-to-point and network integration
7 transmission service (“NITS”) under its OATT. NITS service is provided to 22
8 customers. These 22 network customers have approximately 430 delivery points
9 within the DEC transmission system and comprise about 15% of the demand on
10 the DEC transmission system.

11 **Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF HOW DUKE**
12 **ENERGY CAROLINAS PLANS FOR FUTURE TRANSMISSION NEEDS.**

13 **A.** The DEC transmission system is planned to comply with the North American
14 Electric Reliability Council (“NERC”) Reliability Standards, applicable SERC
15 Reliability Corporation (“SERC”) Reliability Standards and DEC’s internal
16 planning criteria. DEC coordinates its transmission planning and operations with
17 neighboring systems to assure the safety, reliability, and economy of its power
18 system. Coordinated near-term operating studies and longer-range planning
19 studies are made on a regular basis to ensure that transmission capacity will
20 continue to be adequate. These studies involve representatives from the Virginia-
21 Carolinas Subregion (“VACAR”) as well as the SERC region and associated

1 SERC subregions to provide interregional coordination. For intra-regional
2 studies, DEC actively participates on the SERC Intra-Regional Long-Term Power
3 Flow Study Group, the SERC Intra-Regional Near-Term Power Flow Study
4 Group, and the VACAR reliability committees. For inter-regional studies, DEC
5 actively participates on the Eastern Interconnection Reliability Assessment Group
6 (“ERAG”) and the Eastern Interconnection Planning Collaborative.

7 In addition to the above study efforts, PEC, DEC, ElectriCities of North Carolina,
8 Inc, (“ElectriCities”) and the North Carolina Electric Membership Corporation
9 (“NCEMC”) are engaged in a collaborative transmission planning process, the
10 NCTPC. This effort allows ElectriCities and NCEMC to participate in all stages
11 of the transmission planning process, and results in a single collaborative
12 transmission plan for the transmission systems of DEC and PEC designed to
13 address both reliability and market access. In addition, the NCTPC has an open
14 stakeholder process whereby interested stakeholders, through membership in the
15 Transmission Advisory Group, can provide input on the NCTPC Collaborative
16 Planning Process and the annual plan developed by the NCTPC each year.

17 **Q. WHAT DATA DID DUKE ENERGY CAROLINAS PROVIDE TO**
18 **DR. HIERONYMUS FOR HIS INITIAL MARKET SCREEN ANALYSIS**
19 **SUBMITTED IN APRIL, 2011?**

20 **A.** In early 2011, DEC and PEC jointly provided First Contingency Incremental
21 Transfer Capacity (“FCITC”) and Net Scheduled Interchange data for calculation

1 of their Simultaneous Import Limits (“SILs”) used by Dr. Hieronymus in his
2 Competitive Screen Analysis. Dr. Hieronymus supplemented this data with non-
3 SIL path limits (i.e., BAA to BAA), for which DEC and PEC provided
4 Transmission Reliability Margin (“TRM”) data. As Dr. Hieronymus explains in
5 his testimony, the combination of these non-SIL path limits and SILs define the
6 transmission network for purposes of his analysis.

7 **Q. HOW WERE THESE ORIGINAL SIL VALUES FOR THE DUKE**
8 **ENERGY CAROLINAS BALANCING AUTHORITY AREA**
9 **DETERMINED?**

10 **A.** The SIL calculations were undertaken in a manner consistent with the
11 Commission’s orders and precedents, such as those used for purposes of the
12 DEC’s triennial market-based rate filings.¹ An analysis was conducted using the
13 2010 models created by the Multiregional Modeling Working Group of the
14 ERAG. In simple terms, the imported power to DEC is gradually increased until
15 a single contingency (line or transformer outage) results in the overload of another
16 line or transformer. The transfer level at which the first overload occurs would be
17 identified as the FCITC limit. Using the PSS/MUST analytical tool, the single-
18 contingency FCITC for the DEC region was calculated for 2011/12 Winter, 2012
19 Spring and 2012 Summer. In the original market screens described in

¹ Specifically, the methodology for the SIL analysis conducted for purposes of the merger is consistent with the analysis recently accepted by the Commission in connection with the Southeast Region triennial filings. *See Duke Energy Carolinas, LLC et al.*, 138 FERC ¶ 61,134 (2012).

1 Dr. Hieronymus' testimony, the summer FCITC limit calculated for DEC was
2 2300 MW and the winter FCITC limit for DEC was 3200 MW.² The shoulder
3 FCITC limit for DEC was 2500 MW. As described by Dr. Hieronymus, the Net
4 Scheduled Interchange into/from the DEC BAA is added to these FCITC numbers
5 to get the SIL values used for the market screen.

6 **Q. GIVEN THAT THERE WERE SUMMER AND WINTER PERIOD**
7 **MARKET SCREEN FAILURES FOR DEC USING THE ORIGINAL SILs,**
8 **HOW WERE PROJECTS IDENTIFIED TO INCREASE IMPORT**
9 **CAPABILITY?**

10 **A.** The PSS/MUST analysis tool not only identifies the first limiting facility, it also
11 provides a list of subsequent limiting facilities and the values of FCITC associated
12 with them. This list allows the planner to estimate the impacts of correcting a
13 limit through additional transmission projects or operational procedures. For
14 example, in the original summer analysis performed by Duke, the first limiting
15 facility identified, upon which the 2390 MW FCITC limit was based, was Duke's
16 Antioch 500/230 kV transformer, located near the DEC - PJM-AEP interface.
17 The next FCITC limit identified was at 4580 MW with the limiting facility being
18 the AEP Danville–East Danville 138 kV line, located near the PJM-AEP - PEC-
19 East interface. This suggested that if a project or procedure could be identified to

² These FCITC limits reflect the planning convention of “rounding down” to the nearest 100 MW. With respect to the expansion projects described below, the FCITC limits are reported without such rounding, in order to more carefully track post mitigation transmission import capability.

1 alleviate the overload of the Antioch 500/230 kV transformer, then the FCITC can
2 be increased by about 2190 MW (4580-2390).

3 **Q. PLEASE DESCRIBE THE FCITC LIMITING FACILITIES THAT WERE**
4 **IDENTIFIED IN THE ANALYSIS.**

5 **A.** I will limit my discussion to facilities that are addressed by the mitigation
6 projects, as the PSS/MUST tool is capable of identifying literally thousands of
7 limits that would occur from the base transfer level all the way up to whatever
8 MW test level of import is desired. The limiting elements identified in the
9 summer analysis for possible remediation were, with corresponding FCITC
10 increases:

11	<u>Baseline FCITC</u>	2390 MW
12	<u>Cumulative FCITC increase obtained by eliminating limit:</u>	
13	•	Antioch
14	500/230 kV transformers (DEC BAA)	+2190 MW
15	•	Danville–East
16	Danville 138 kV line (AEP BAA)	+2440 MW

17 It is important to note that a limiting line or transformer may appear multiple
18 times at different import levels. For simplicity, the above list only identifies a
19 limiting facility the first time it appears in the analysis. As shown, the increase to
20 the DEC Summer FCITC, if these limiting elements are addressed, is 2440 MW.

(Because the Net Scheduled Interchange does not change, the changes in SIL values are equal to the changes in FCITC values.)

The limiting elements identified in the winter analysis for possible remediation were, with corresponding FCITC increases:

Baseline FCITC	3270 MW
----------------	---------

FCITC increase obtained by eliminating limit:

•	Antioch
500/230 kV transformers (DEC BAA)	+1930 MW

Thus, the increase in the DEC Winter FCITC, if the limiting element is addressed, is 1930 MW. (Because the Net Scheduled Interchange does not change, the changes in SIL values are equal to the changes in FCITC values.)

Q. WHAT PROJECTS AND/OR OPERATING PROCEDURES WERE IDENTIFIED TO ADDRESS THE FCITC LIMITS LISTED ABOVE?

A. Two projects were identified, one on the DEC system, and one on the PEC system which Mr. Waters addresses in his testimony. To address the Antioch limit, DEC has identified a project to increase the transformer capability at DEC's Antioch Tie 500/230 kV Station. After completion of the Antioch project additional power can flow from the PJM-AEP BAA into the DEC and PEC-East BAAs, increasing the FCITC limits for DEC and PEC-East. PEC has identified a project and an operating procedure which addresses the elimination of the limit caused by

1 the AEP Danville–East Danville 138 kV line, which is discussed more fully in
2 Mr. Waters’ testimony. The locations of the DEC (as well as the PEC projects
3 and the operating procedure) are shown on the map attached hereto as Exhibit No.
4 DEC-3.

5 **Q. PLEASE DESCRIBE THE TRANSMISSION PROJECT THAT DUKE**
6 **ENERGY CAROLINAS PLANS TO UNDERTAKE AS PART OF THE**
7 **PERMANENT MITIGATION PROPOSAL MADE IN THIS FILING.**

8 **A.** As noted above, DEC has one project, which is to increase the transformer
9 capacity at DEC’s Antioch Tie Station (see Exhibit No. DEC-3, item 1). The
10 Antioch Tie Station is an existing 500/230 kV transmission station located in
11 Wilkes County, North Carolina. Antioch Tie connects to the Antioch- Jacksons
12 Ferry 500 kV line which is DEC’s primary interconnection with AEP and the
13 PJM market. Currently, there is 1500 MVA of total installed capacity at the site,
14 consisting of two 750 MVA transformers. To meet the proposed capacity
15 increase, the project will replace the existing transformers with two 1500 MVA
16 transformers for a total capacity of 3000 MVA.

17 The three major elements of the project are:

- 18 1. Specification, award of order and delivery of transformers;
- 19 2. Engineering and installation of electrical/relaying upgrades to the transformer
20 protection scheme and the necessary 500 kV/230 kV switchyard modifications
21 at Antioch Tie and at the nearby Mitchell River Tie (on the Antioch-Mitchell

1 River 230 kV line) which includes the replacement of two breakers at Mitchell
2 River Tie; and

3 3. Removal of the existing transformers and installation of the new transformers.

4 **Q. WHAT IS THE COST OF THE ANTIOCH TIE PROJECT?**

5 **A.** The estimated cost of the Antioch Tie Station project is \$50 million.

6 **Q. WHAT IS THE SCHEDULE FOR COMPLETION OF THE ANTIOCH**
7 **TIE PROJECT?**

8 **A.** The estimated time schedule for design, equipment acquisition and construction
9 from project start to completion is three years, about half of which is transformer
10 delivery time. No additional rights-of-way or state-issued certificates are required
11 to complete this project except for routine local construction permits and a permit
12 from the North Carolina Department of Transportation to facilitate transport of
13 the transformers from a rail siding to the site.

14 **Q. WERE ANY OPERATING PROCEDURES ON THE DEC SYSTEM**
15 **IDENTIFIED TO ADDRESS FCITC LIMITS?**

16 **A.** To address the FCITC limits on the PEC System, DEC has identified an operating
17 procedure at DEC's Parkwood 500/230 kV Station, as described below. An
18 operating procedure is a tool the system operator uses to maintain the reliability of
19 the transmission system and transmission service to customers. The operating
20 procedure sets out steps (e.g., changes in system configuration, changes in system

1 dispatch) that the system operator may take to relieve system loading or other
2 reliability concerns.

3 **Q. PLEASE DESCRIBE THE OPERATING PROCEDURE FOR DEC'S**
4 **PARKWOOD 500/230 KV TIE STATION.**

5 **A.** The Parkwood Tie Station is radially connected to DEC's 500 kV system, near the
6 border of the DEC BAA and the PEC BAA in Durham County, North Carolina
7 (see Exhibit No. DEC-3, item 4). Facilities in the Parkwood Tie Station include
8 two 500/230 kV transformers. In order to facilitate the increase in transfer
9 capability into the PEC-East system, an operating procedure is needed for this
10 facility. Under conditions where there are large power flows into the PEC-East
11 BAA, the contingency loss of one of the two 500/230 kV transformers can result
12 in the overloading of the remaining transformer. To protect the remaining
13 transformer and allow for power to continue to move reliably into PEC-East on
14 the underlying 230 kV network, an operating procedure would be implemented
15 under which the system operator removes the remaining transformer from service
16 after the loss of the first transformer, which has the same effect as opening the
17 500kV line. Opening the 500kV line has no impact on bulk electric system
18 reliability and does not limit transfer capability. There is no cost to implement the
19 procedure.

1 **Q. WAS THE ANTIOCH TIE STATION PROJECT “FORESEEABLE” OR**
2 **“REASONABLY CERTAIN” TO OCCUR PRIOR TO BEING PROPOSED**
3 **AS PERMANENT MITIGATION IN THIS FILING?**

4 **A.** No. The Antioch Tie Station project does not and has never appeared in DEC’s
5 State Commission-filed Integrated Resource Plan. No funding has ever been
6 allocated for such a project in any internal budget plan. The NCTPC compiles an
7 annual study report which identifies potential future transmission construction or
8 upgrade projects based upon anticipated needs and specifically-identified
9 potential transmission service requests (which requests may or may not later
10 occur). In the 2006-2007 NCTPC study reports, upgrade of the Antioch Tie
11 Station transformers was identified as potentially being “planned” in 2013-2014.³
12 In the 2008 NCTPC study report, the Antioch Tie Station project was moved into
13 the “deferred” category, due to reduced load growth projections and generation
14 additions which moved the project back to the 2024 time frame.⁴ The Antioch Tie
15 Station project has not moved back into the “planned” category in any of the
16 succeeding NCTPC annual study reports since 2008. The factors that caused the
17 project to be moved from the “planned” category to the “deferred” category still
18 exist. DEC’s most current internal planning studies do not indicate a potential

³ “Planned” is described as follows: “Projects with this status do not have money in the Transmission Owner’s current year budget; and the project is subject to change.”

⁴ “Deferred” is described as follows: “Projects with this status were identified in the 2007 Supplemental Report and have been deferred beyond the end of the planning horizon based on analysis performed to develop the 2008 Collaborative Transmission Plan.”

1 need for the Antioch Tie Station project within the traditional 10-year planning
2 horizon.

3 **Q. WHAT ADDITIONAL DATA DID DUKE ENERGY CAROLINAS**
4 **PROVIDE FOR USE BY DR. HIERONYMUS FOR THE MARKET**
5 **SCREEN CALCULATIONS SUBMITTED WITH THIS COMPLIANCE**
6 **FILING?**

7 **A.** In addition to the FCITC data previously discussed herein, DEC also provided the
8 data showing the Available Transfer Capability (“ATC”) increases resulting from
9 the projects proposed in this filing. Also, we provided the contract path limits
10 between adjoining BAA’s and DEC, which provide a measure of the limits to
11 commercial availability of transmission between systems that is sometimes more
12 restrictive than calculated ATCs. These contract path limits are determined by the
13 adjoining balancing authorities.

14 **Q. PLEASE DESCRIBE THE METHODOLOGY USED TO ARRIVE AT**
15 **SUCH ATC INCREASES.**

16 **A.** DEC examined the impacts of the Antioch Project on the transmission capability
17 at its interface with PJM. This could be viewed as a determination of the
18 available transmission capacity (“ATC”) at this interface. However, I want to be
19 very clear in terminology here, because ATC is generally considered to be the
20 posted value on the OASIS system associated with a company’s open-access
21 transmission tariff, a measure of transmission available to customers for service.

1 ATC values are also generally determined and posted only for a projected period
2 of 13 months or less, and they reflect current or real-time conditions, which may
3 often be different than the forecast conditions used in the planning realm. The
4 analysis done by DEC examined the *expected* increase to transmission capability
5 on the PJM-DEC interface when the projects are expected to be placed in service.
6 A similar analysis to the FCITC/SIL calculations was performed for the 2015-16
7 timeframe, and I will refer to this additional analysis as FCITC/ATC. The
8 methodology attempts to mimic the methodology employed to determine the ATC
9 values posted in real time. Utilizing PSS/MUST, imports were increased into
10 DEC by increasing the generation in the adjoining BAA (PJM) and decreasing the
11 generation in the DEC BAA. The DEC generation was decreased by selecting the
12 generation whose loss is assumed to create the most adverse impact on the PJM
13 interface. This increase/decrease of generation was done until a single
14 contingency resulted in the overload of a facility. The import limit is reached
15 when the first facility limit is identified. The FCITC/ATC value is identified as
16 the import capability at that first limiting facility.

17 **Q. PLEASE SUMMARIZE THE RESULTING ATC INCREASE DATA.**

18 **A.** Based on the approach described in my previous answer, the increases to the
19 FCITC/ATC interface capabilities, i.e., the ability to bring power from PJM into
20 the DEC BAA, resulting from the Antioch Tie Station project are:

1 Summer 2015 PJM to DEC 1500 MW

2 Winter 2015/2016 PJM to DEC 1500 MW

3 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

4 **A.** Yes, it does.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Corporation

)

Progress Energy, Inc.

)

)

Docket No. EC11-60-001

AFFIDAVIT OF HENRY EDWIN ERNST, JR.

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

HENRY EDWIN ERNST, JR., being duly sworn, deposes and states that he prepared the Direct Testimony of Henry Edwin Ernst, Jr., and that the statements contained therein and the Exhibits attached thereto are true and correct to the best of his knowledge and belief.

Henry Edwin Ernst, Jr.
Henry Edwin Ernst, Jr.

SUBSCRIBED AND SWORN TO BEFORE ME, this the 23 day of March, 2012.

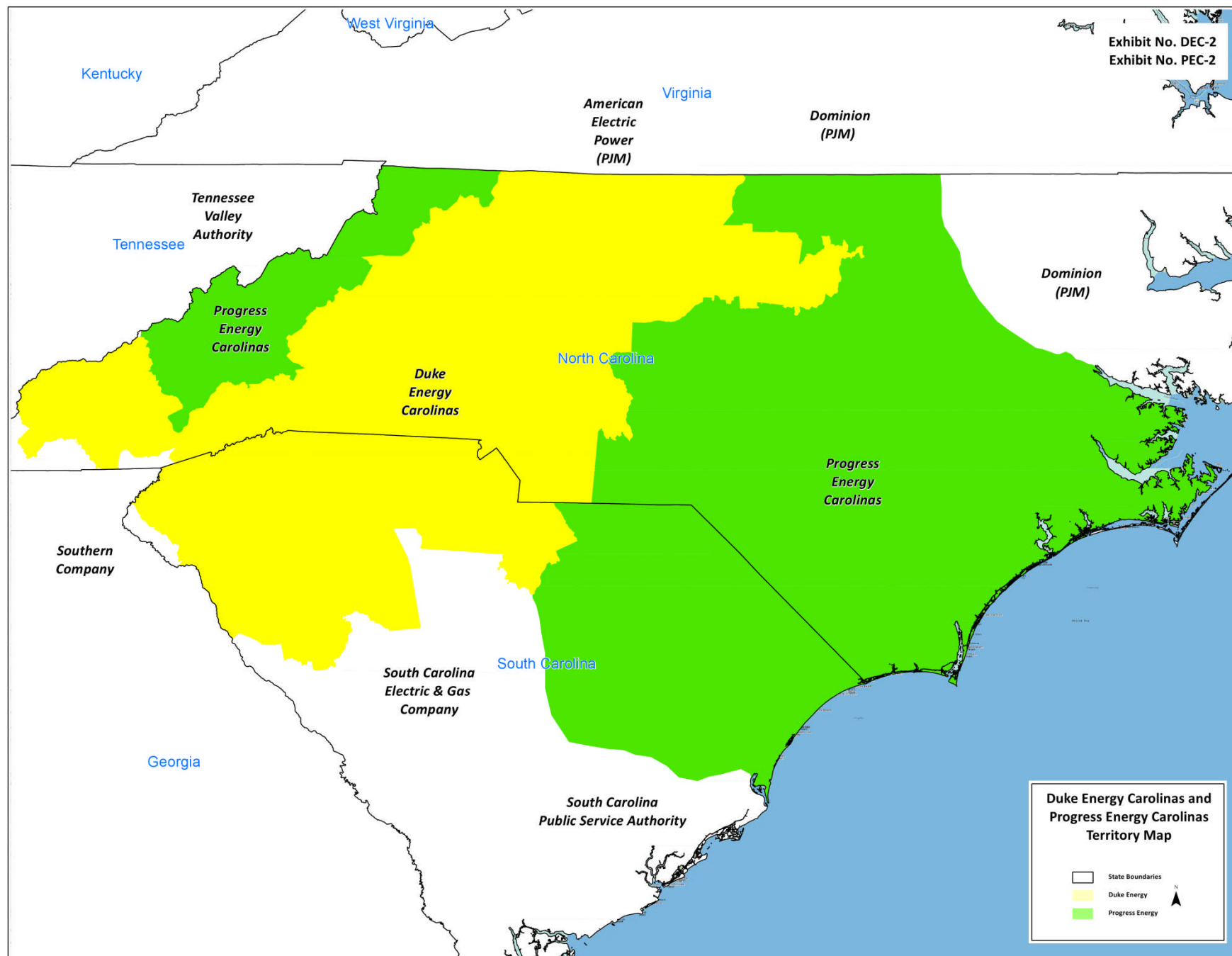
Patricia C. Ross
Notary Public

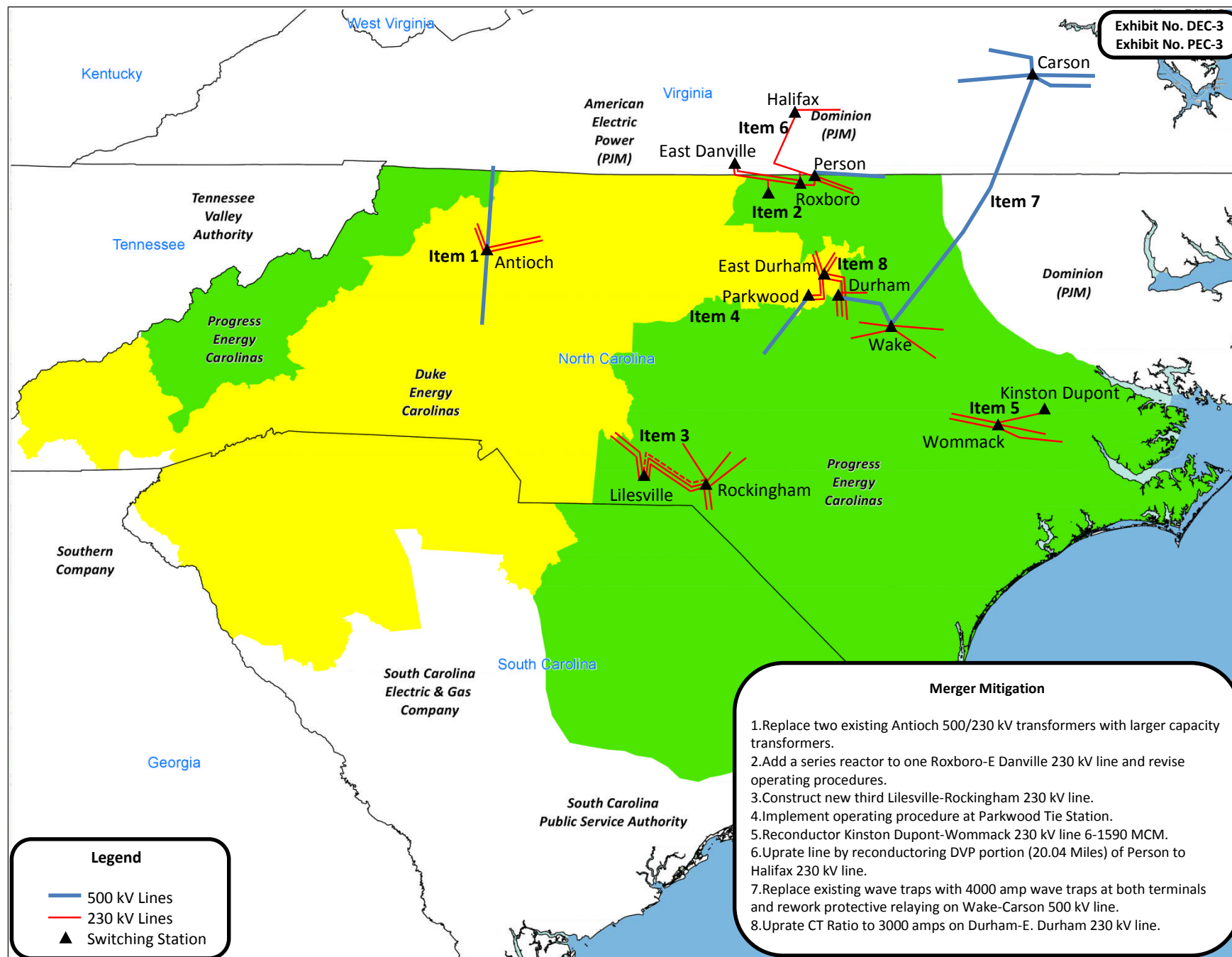


Printed Name: Patricia C. Ross

My Commission Expires: 10-17-2014

Exhibit No. DEC-2
Exhibit No. PEC-2





UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Corporation

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Progress Energy, Inc.

)

Docket No. EC11-60-001

PREPARED DIRECT TESTIMONY OF
SAMUEL S. WATERS
ON BEHALF OF
PROGRESS ENERGY, INC.

1 **Q. Please state your name, employer, and business address.**

2 **A.** My name is Samuel S. Waters. My business address is 100 E. Davie St., Raleigh, North
3 Carolina, 27601.

4 **Q. On whose behalf are you testifying in this proceeding?**

5 **A.** I am testifying on behalf of Progress Energy Carolinas (PEC).

6 **Q. Please tell us your position with PEC and describe your duties and responsibilities**
7 **in that position.**

8 **A.** I am Director of System Planning and Regulatory Performance for Progress Energy
9 Carolinas. I am responsible for directing the resource and transmission planning
10 processes for the company, as well as managing the coordination activities of the
11 Transmission Operations and Planning Department with regard to compliance with
12 reliability standards of the North American Reliability Corporation (NERC).

1 **Q. Please summarize your educational background and employment experience.**

2 **A.** I graduated from Duke University with a Bachelor of Science degree in Engineering in
3 1974. From 1974 to 1985, I was employed by the Advanced Systems Technology
4 Division of the Westinghouse Electric Corporation as a consultant in the areas of
5 transmission planning and power system analysis. While employed by Westinghouse, I
6 earned a Masters Degree in Electrical Engineering from Carnegie-Mellon University.

7 From 1985 to 2002, I was employed by Florida Power & Light Company (FPL), where I
8 managed the resource planning and state regulatory affairs functions.

9 I joined Progress Energy in 2004 as Director of Resource Planning. I assumed my
10 current position in 2007. I am a registered Professional Engineer in the states of
11 Pennsylvania and Florida, and a Senior Member of the Institute of Electrical and
12 Electronics Engineers, Inc. (IEEE).

13 **Q. Have you previously testified before any regulatory authorities?**

14 **A.** Yes. I have testified before this Commission in my previous position with Florida Power
15 & Light Company, and I have testified in several proceedings before the North Carolina
16 Utilities Commission, the Public Service Commission of South Carolina and the Florida
17 Public Service Commission.

18 **Q. What is the purpose of your testimony in this proceeding?**

1 **A.** My testimony will describe the existing PEC transmission system and the transmission
2 planning process, and will explain the transmission enhancements that PEC will
3 undertake to increase system import capability and increase access for wholesale
4 suppliers to markets inside the PEC and Duke Energy Carolinas, LLC (DEC) balancing
5 authority areas (BAAs). The specific projects described, along with the DEC projects
6 described in Mr. Ernst's testimony, will serve as permanent mitigation for the PEC
7 market screen failures identified in Dr. Hieronymus' testimony.

8 **Q. Please describe the existing PEC transmission system.**

9 **A.** The PEC system consists of two separate BAAs, PEC-East and PEC-West, which are
10 located on either side of, and interconnected through, the DEC transmission system. The
11 PEC-East BAA generally covers the eastern half of North Carolina and the northeastern
12 region of South Carolina. The PEC-West BAA consists of the Asheville, North Carolina
13 region and surrounding territory. A map showing the DEC, PEC-East and PEC-West
14 BAAs and adjacent systems is attached hereto as Exhibit PEC-2 (the same map is also
15 attached to Mr. Ernst's testimony on behalf of DEC).

16 The PEC transmission system consists of approximately 6,000 miles of 69, 115, 138, 161,
17 230 and 500 kV transmission lines and just over 100 transmission-class switching
18 stations in its North and South Carolina service areas. PEC has transmission
19 interconnections with DEC, PJM (via American Electric Power (AEP) and Dominion
20 Virginia Power (Dominion)), South Carolina Electric & Gas Company, South Carolina

1 Public Service Authority, Tennessee Valley Authority, and Yadkin. PEC provides both
2 point-to-point and network integration transmission service (NITS) under its Open
3 Access Transmission Tariff (OATT). NITS service is provided to 13 customers. These
4 13 network customers have approximately 205 delivery points within the PEC
5 transmission system and comprise about 31% of the demand on the PEC transmission
6 system.

7 **Q. Would you please provide a general description of how PEC plans for future**
8 **transmission needs?**

9 **A.** The PEC transmission system is planned to comply with the NERC Reliability Standards,
10 applicable SERC Reliability Corporation (SERC) Standards and PEC's internal planning
11 criteria. PEC coordinates its transmission planning and operations with neighboring
12 systems to assure the safety, reliability, and economy of its power system. Coordinated
13 near-term operating studies and longer-range planning studies are made on a regular basis
14 to ensure that transmission capacity will continue to be adequate. These studies involve
15 representatives from the Virginia-Carolinas Subregion (VACAR) as well as the SERC
16 region and its associated adjacent subregions to provide interregional coordination. For
17 intra-regional studies, i.e., within SERC, PEC actively participates on the Intra-regional
18 Long-Term Power Flow Study Group, the Intra-Regional Near-Term Power Flow Study
19 Group, and the VACAR reliability committees. For inter-regional studies, PEC actively
20 participates on the Eastern Interconnection Reliability Assessment Group (ERAG) and
21 the Eastern Interconnection Planning Collaborative.

1 In addition to the above study efforts, PEC, DEC, ElectriCities of North Carolina
2 (ElectriCities) and the North Carolina Electric Membership Corporation (NCEMC) are
3 engaged in a collaborative transmission planning process through the North Carolina
4 Transmission Planning Collaborative (NCTPC). This effort allows ElectriCities and
5 NCEMC to participate in all stages of the transmission planning process, and results in a
6 single collaborative transmission plan for the transmission systems of PEC and DEC
7 designed to address both reliability and market access. In addition, the NCTPC has an
8 open stakeholder process whereby interested stakeholders, through membership in the
9 Transmission Advisory Group, can provide input on the NCTPC Collaborative Planning
10 Process and the annual plan developed by the NCTPC each year.

11 **Q. What data did PEC provide for use by Dr. Hieronymus in the initial market screen**
12 **analysis submitted in April 2011?**

13 **A.** In early 2011, PEC and DEC jointly provided First Contingency Incremental Transfer
14 Capability (FCITC) and Net Scheduled Interchange data for calculation of their
15 Simultaneous Import Limits (SIL) used by Dr. Hieronymus in his Competitive Screen
16 Analysis. Dr. Hieronymus supplemented this data with non-SIL path limits (i.e., BAA to
17 BAA) for which PEC and DEC provided Transmission Reliability Margin (TRM) data.
18 As Dr. Hieronymus explains in his testimony, the combination of these non-SIL path
19 limits and SIL define the transmission network for purposes of his analysis.

20 **Q. How were the original SIL values for the PEC-East BAA determined?**

1 **A.** The SIL calculations were undertaken in a manner consistent with the Commission's
2 orders and precedents, such as those used for purposes of the company's triennial market-
3 based rate filings.¹ An analysis was conducted using the 2010 models created by the
4 Multiregional Modeling Working Group of the ERAG. Using the PSS/MUST analytical
5 tool, the single-contingency SIL values for the PEC-East BAA were calculated for
6 2011/12 Winter, 2012 Spring, also referred to as a Shoulder value, and 2012 Summer. In
7 simple terms, the amount of imported power to the PEC-East BAA is gradually increased
8 until a single contingency (line or transformer outage) results in the overload of another
9 line or transformer. The transfer amount at which the first overload occurs would be
10 identified as the FCITC. In the original market screens described in Dr. Hieronymus'
11 testimony, the FCITC summer limit provided was 2100 MW, the FCITC Winter limit
12 was 4300 MW, and the Shoulder limit provided was 3200 MW.² As described by Dr.
13 Hieronymus, the Net Scheduled Interchange into/from the PEC-East BAA is added to
14 these FCITC numbers to get the SIL used for the market screen.

1 Specifically, the methodology for the SIL analysis conducted for purposes of the merger is consistent with the analysis recently accepted by the Commission in connection with the Southeast Region triennial filings. *See Duke Energy Carolinas, LLC et al.*, 138 FERC ¶ 61,134 (2012).

2 These FCITC limits reflect the planning convention of "rounding down" to the nearest 100 MW. With respect to the expansion projects described below, the FCITC limits are reported without such rounding, in order to more carefully track post mitigation transmission import capability.

1 **Q. Given that there were market screen failures for the PEC-East BAA in the summer**
2 **period using the original SIL, how were projects identified to increase import**
3 **capability?**

4 **A.** The PSS/MUST analysis tool not only identifies the first limiting facility, it also provides
5 a list of subsequent limiting facilities and the values of FCITC associated with them.
6 This list allows the planner to estimate the impacts of correcting a limit through
7 additional transmission projects or operational procedures. For example, in the original
8 analysis performed by PEC, the first limiting facility identified, upon which the 2100
9 MW number was based, was one of the parallel Danville-East Danville 138 kV lines,
10 located in the AEP (PJM) system. The next identified limiting facility was one of the
11 parallel Axton-Danville lines, which are also in the AEP area, in series with the Danville-
12 East Danville lines. This appearance is at a transfer level of 2670 MW. The first facility
13 to appear as a limit, outside of the AEP area, is the Parkwood 500/230 kV transformer
14 bank in the DEC system. Mr. Ernst addresses that limit in his testimony.

15 **Q. Please describe the FCITC limiting facilities that were identified in the analysis.**

16 **A.** I will limit my discussion to the facilities that are addressed by the mitigation projects, as
17 the PSS/MUST tool is capable of identifying literally thousands of limits that would
18 occur from the 2100 MW level all the way up to more than 11,000 MW of import,
19 essentially an import level equivalent to the entire load within the PEC-East BAA.

1 The limiting elements³ identified in the analysis for possible remediation were:

Limiting Element	FCITC	Possible Cumulative FCITC increase obtained by eliminating limit:
Danville –East Danville 138 kV line (AEP)	2160 MW	+ 510 MW
Axton-Danville 138 kV line (AEP)	2670 MW	+ 830 MW
Parkwood 500/230 kV transformers (DEC)	2990 MW	+ 1290 MW
Antioch 500/230 kV transformers (DEC)	3450 MW	+ 1340 MW
Lilesville-Rockingham 230 kV line (PEC)	3500 MW	+ 1810 MW
Greenville-Everetts 230 kV line (PEC-Dominion tie)	3970 MW	+ 2240 MW
Person – Halifax 230 kV line (PEC-Dominion tie)	4400 MW	+ 2370 MW

³ A limiting line or transformer may appear multiple times at different import levels. For simplicity, the above list only identifies a limiting facility the first time it appears in the analysis.

1 Thus, the increase to the PEC-East BAA FCITC, if all of these limiting elements are
2 addressed, is approximately 2370 MW. I say approximately because, as each limit is
3 addressed by a specific project, there may be slight changes in the subsequent limits. The
4 final change to the FCITC value is determined by calculating the values with all proposed
5 projects included in the case. Based on implementation of the projects described below,
6 the expected increase to the FCITC into the PEC-East BAA, which served as the basis for
7 the SIL increase, is 2225 MW. Because the Net Scheduled Interchange does not change,
8 the changes in SIL values are equal to the changes in FCITC values.

9 **Q. What projects and/or operating procedures were identified to address the FCITC**
10 **improvements for the limits listed above?**

11 **A.** PEC identified six projects/operating procedures to address the Danville-East
12 Danville/Axton-Danville, Lilesville-Rockingham, Greenville-Everetts and Person-
13 Halifax limits, and to add transfer capability to the PJM-PEC-East interface. DEC has
14 identified an operating procedure and a project that will address the Parkwood and
15 Antioch limits, and they are described in Mr. Ernst's testimony. The locations of the
16 PEC and DEC projects are shown on the map attached hereto as Exhibit PEC-3.

17 The projects/procedures identified by PEC are 1) addition of a series reactor on the
18 Roxboro-East Danville 230 kV line, combined with dispatch procedures for generation at
19 the Roxboro and Mayo plants, and an operating procedure to open one Roxboro-East
20 Danville 230 kV line to address the Danville-East Danville and Axton-Danville limits, 2)

1 construction of a new 230 kV line between the existing PEC Lilesville and Rockingham
2 substations on existing right-of-way to address the Lilesville-Rockingham limits, 3)
3 reconductoring of the existing Kinston Dupont – Wommack 230 kV line which, when
4 combined with the acceleration of an existing project (described below), addresses the
5 Greenville-Everetts limit, 4) reconductoring of the Person-Halifax 230 kV tie with
6 Dominion which addresses the Person-Halifax limit, 5) uprating of the Durham-East
7 Durham 230 kV tie with DEC by replacing ancillary equipment to address a limit which
8 appears as other improvements are made and 6) replacement of limiting equipment,
9 specifically existing wave traps, on the Wake-Carson 500 kV tie with Dominion, which
10 adds capacity to the PJM/PEC-East interface.

11 **Q. Please describe how the first project that PEC plans to undertake as part of the**
12 **permanent mitigation plan, the series reactor combined with operating procedures,**
13 **addresses the identified Danville-East Danville and Axton-Danville transmission**
14 **limits in more detail.**

15 **A.** The Danville-East Danville 138 kV lines in AEP are in series, meaning that as imports
16 from PJM into the PEC-East BAA increase, both lines will be at or near their limit at
17 roughly the same import level. This suggests that both limits might be addressed with
18 one solution. It is also important to note that these lines are connected into the PEC
19 system though the East Danville-Roxboro 230 kV tie line. In this instance, we have
20 AEP's 138 kV system connected to PEC's 230 kV system, and that means that PEC's

1 system can accept much more power than the AEP system can deliver. This is the
2 weakest link between the PEC BAA and PJM.

3 Since there are several stronger, i.e., larger capacity, ties between the PEC-East
4 BAA/DEC BAA and PJM, the solution to these limits is to “push back” into the
5 AEP/PJM system or constrain the flow on this path to force power back towards the
6 stronger ties. PEC has several large coal units located at Roxboro and nearby Mayo
7 which, due to their proximity to the tie with AEP, serve to push power back towards
8 AEP/PJM. The first step to address the Danville-East Danville/Axton-Danville limits is
9 an operating procedure to ensure that the units at Roxboro and Mayo are running at full
10 capacity. An operating procedure is a tool the system operator uses to maintain the
11 reliability of the transmission system and transmission service to customers. The
12 operating procedure sets out steps (e.g., changes in system configuration, changes in
13 system dispatch) that the system operator may take to relieve system loading or other
14 reliability concerns.

15 In addition to this step, the impedance to flows into the system can be selectively
16 increased by adding a series reactor to the PEC-owned portion of one of the Roxboro-
17 East Danville lines, and opening the parallel line, resulting in more than double the
18 impedance between these two points and restraining additional power flow along this
19 path.

1 **Q. Since the limits to import capability for the PEC-East BAA are within the AEP**
2 **system, have you discussed the limitation with AEP?**

3 **A.** Yes. AEP is aware of the limitations of these facilities (Axton-Danville-East Danville)
4 and recognizes that the constraint, in part, results from a de-rating done while they are
5 surveying their existing system and recalculate ratings. It is their expectation that the two
6 parallel Danville-East Danville lines will be returned to the rating they held as recently as
7 two years ago, when AEP de-rated the lines pending their survey. The two parallel
8 Axton-Danville 138 kV lines have already been returned to their original ratings of
9 394/398 MVA which is approximately 100 MVA higher for each line than was used in
10 our studies. AEP currently plans to examine the Danville-East Danville lines and expects
11 to return those lines to their original ratings of 384 MVA from the current 275 MVA
12 within two years.

13 **Q. Would these increased ratings affect the results of your calculations of FCITC and**
14 **the need for the proposed reactor project on the Roxboro-East Danville line?**

15 **A.** The increased ratings would have a positive impact on the analysis in that it would
16 increase the amount of power that could be transferred before the limits on the Axton-
17 Danville-East Danville path are encountered. However, to achieve the full increase in
18 transfer capability and receive benefit from the other projects described, the reactor
19 project is still required. Currently, there are no plans to pursue this project absent the
20 merger.

1 **Q. Please describe the 2nd project in your permanent mitigation plan, the addition of**
2 **new 3rd Lilesville-Rockingham 230 kV line, and the resulting improvement in the**
3 **FCITC values.**

4 A. With the reactor addition and operating procedure addressing the Axton-Danville-East
5 Danville limits, the existing Lilesville-Rockingham 230 kV transmission lines become
6 the next limiting facilities, and the addition of a new line increases the FCITC by
7 alleviating this limit. Currently, there are two parallel 230 kV lines between Lilesville
8 and Rockingham. The limit identified in the study results from the overload of either one
9 of these lines when the parallel line is out. Addition of a third line between these stations
10 alleviates the overload for the single contingency condition.

11 The Lilesville-Rockingham 230 kV line addition has been identified in previous studies
12 by the NCTPC, and by PEC's own internal studies, as necessary to support additional
13 import capability. PEC has identified this addition in response to past requests for
14 transmission service related to imports, which have subsequently been withdrawn.
15 Currently, there are no plans to pursue this project absent the merger.

16 **Q. Please describe the Kinston Dupont-Wommack reconductoring project.**

17 A. The existing Kinston Dupont-Wommack line is approximately 20 miles in length and
18 uses a single conductor design. The reconductoring project would replace existing
19 conductors and transmission structures to support a bundled conductor design. Currently,
20 there are no plans to pursue this project absent the merger.

1 **Q. Please describe the project which addresses the Person-Halifax limit identified**
2 **above.**

3 **A.** The Dominion portion of the Person-Halifax 230 kV tie line is approximately 20.4 miles
4 in length. The reconductoring project would replace existing conductors with conductors
5 with greater capacity and would replace some of the transmission structures to achieve a
6 summer rating of 712 MVA. Currently, there are no plans to pursue this project absent
7 the merger.

8 **Q. Since the limits to import capability for the PEC-East BAA are within the Dominion**
9 **system, have you discussed the limitation with Dominion?**

10 **A.** Yes. Dominion is aware of the limitations of these facilities, and has reviewed the
11 proposed solution of reconductoring their portion of the Person-Halifax line, as well as
12 the proposed upgrade of the wave traps on the Wake-Carson line, described below. The
13 cost and schedule estimates provided below were calculated by Dominion based on their
14 engineering evaluation.

15 **Q. The Durham-East Durham 230 kV tie line with DEC does not appear on your list of**
16 **limiting facilities. Why do you have a project to address this line in your mitigation**
17 **plan?**

18 **A.** Each individual project or operating procedure has an impact on the system, changing
19 how power flows in the system when compared to the initial state upon which the
20 original limits are calculated. In this case, as the projects to address the Axton-Danville-

1 East Danville and Person-Halifax ties with PJM are implemented, the flows across other
2 ties with PEC are affected, and new limits may emerge, which can be detected only by
3 interim analyses that identify those specific effects. After reviewing the previously
4 described projects, we have decided that the Durham-East Durham line becomes a
5 limiting facility after implementation of other mitigation projects and must also be
6 addressed to achieve the full identified increase in system import capability.

7 **Q. What action is necessary to eliminate the Durham-East Durham 230 kV line as a**
8 **limit?**

9 **A.** The only project required to alleviate the potential facility overload is to change the
10 current transformer tap settings, if feasible, or replace the current transformer (CT) at the
11 East Durham substation. Currently, there are no plans to pursue this project absent the
12 merger.

13 **Q. The final project you have identified, replacement of wave traps on the Wake-**
14 **Carson 500 kV tie with Dominion does not appear to be tied to the elimination of a**
15 **specific limit. Please describe why this is part of the overall mitigation plan.**

16 **A.** Just as the implementation of earlier projects led to the identification of the need to
17 address the Durham-East Durham line, so too was the Wake-Carson 500 kV line
18 identified as a possible limit to increased imports into the PEC-East BAA. The 500 kV
19 tie capability is limited by the wave traps currently in the line on both the PEC and
20 Dominion ends, and can easily be upgraded by replacement of those traps. This is not

1 expected to be a significant expense or require a long lead time. The primary benefit of
2 this project is an increase to the contract path between PJM and the PEC-East BAA, with
3 an increase in the contract path of more than 800 MW. Since the import capability from
4 PJM into the PEC-East BAA is actually limited by contract path, i.e., the actual sum of
5 the ratings of ties between the two BAAs, the increase of contract path is more beneficial
6 to import capability than the FCITC increase resulting from the project. Currently, there
7 are no plans to pursue this project absent the merger.

8 **Q. Please describe the cost and schedule for the projects PEC is proposing.**

9 **A.** The Roxboro reactor addition is estimated to cost approximately \$6.6 million, with a total
10 time to design, acquire materials and construct of two years. PEC currently owns specific
11 property that can be used for the reactor site, and it is expected that the reactor will be
12 placed along the existing line right-of-way. There are no significant permitting issues.
13 Routine permits from state and county agencies will be required.

14 The Lilesville-Rockingham 230 kV line construction is expected to cost approximately
15 \$15.7 million with a two year lead time for engineering and construction. The length of
16 the proposed line is approximately 13 miles. PEC already owns the necessary right-of-
17 way and has the necessary CPCN from the state of North Carolina. These steps were
18 taken in response to the specific request for transmission service by outside parties noted
19 above, which were later withdrawn. There are no significant permitting or other issues

1 for this project. Routine permits from state and county agencies will be required. None
2 of these are expected to be an impediment to meeting the cost and schedule targets above.

3 The reconductoring of the Kinston Dupont-Wommack 230 kV line is expected to cost
4 approximately \$18 million. The existing Kinston Dupont-Wommack line is
5 approximately 20 miles long, and the reconductoring, along with associated required
6 changes to the ancillary equipment (CTs) will result in an increase in rating from 597 to
7 797 MVA.

8 The reconductoring of the Person-Halifax 230 kV tie with Dominion will be
9 accomplished within two and one half years, with agreement from Dominion. The
10 expected cost is about \$16.2 million. Reconductoring is not expected to present any
11 significant permitting issues.

12 The Durham-East Durham CT uprate is a relatively small project, expected to cost less
13 than \$500,000, and can be easily scheduled within a two year time window. The
14 replacement of the wave traps on the Wake-Carson 500 kV tie line with Dominion is also
15 a small project, expected to cost approximately \$1.5 million, including any necessary
16 engineering for changes to protective relaying equipment, and can be completed in
17 approximately 15 months.

18 **Q. Is it foreseeable or reasonably certain that the projects that PEC is proposing would**
19 **be constructed absent the merger?**

1 A. It is not foreseeable or reasonably certain that any of the projects being proposed would
2 be constructed absent the Merger. None of these projects appear in PEC's Transmission
3 Additions Plan or the State Commission-filed Integrated Resource Plan, and no funding
4 has been allocated to any of them in PEC's internal budget. While some of the projects
5 have been studied by the NCTPC, none of them currently are in the "planned" category of
6 the current NCTPC annual study report⁴.

7 **Q. In addition to these six projects, are there any other steps that PEC is taking to**
8 **increase its import capability?**

9 A. Yes. PEC also is proposing to accelerate the in-service date of the Greenville-Kinston
10 Dupont line, which is currently included in PEC's Transmission Additions Plan and the
11 State Commission-filed Integrated Resource Plan as a reliability project with a planned
12 in-service date of 2017. In conjunction with its six proposed projects, PEC will place the
13 Greenville-Kinston Dupont line in service in 2015, at the same time that the
14 reconductoring of the Kinston Dupont-Wommack 230 kV line will be completed. While
15 the Greenville-Kinston Dupont line does not, by itself, increase PEC's import capability,
16 this line in conjunction with the reconductoring of the Kinston Dupont-Wommack 230
17 kV line, will address the limit on the Greenville-Everetts 230 kV tie with Dominion.
18 Consequently, the Greenville-Kinston Dupont line must be in service in order for the
19 reconductoring of the Kinston Dupont-Wommack 230 kV line and all subsequent
20 projects described above to increase PEC's import capability as planned.

⁴ "Planned" is described as follows: "Projects with this status do not have money in the Transmission Owner's current year budget; and the project is subject to change."

1 **Q. What additional data did PEC provide for use by Dr. Hieronymus in the current**
2 **market screen evaluations submitted with this filing?**

3 **A.** In addition to the FCITC values discussed above, PEC also provided the
4 FCITC/Available Transfer Capability (ATC) increases resulting from the projects
5 proposed in this filing. ATC provides a measure of the transmission capability from
6 adjoining areas into the PEC-East BAA independently. PEC also provided contract path
7 limits between adjoining balancing authority areas and the PEC-East BAA, which
8 provide a measure of the limits to commercial availability of transmission between
9 systems that is sometimes more restrictive than calculated ATCs. The contract path
10 limits used in the original analysis were determined by the adjoining balancing
11 authorities. The increases in contract path limits were determined by PEC.

12 **Q. Please describe the results of the FCITC/ATC studies performed to provide inputs**
13 **into the market screen analyses.**

14 **A.** In addition to analyzing the FCITC impacts used in the determination of SIL values, PEC
15 examined the impacts of the projects on the transmission capability at the interfaces with
16 DEC and PJM. This could be viewed as a determination of the ATC at these interfaces.
17 However, I want to be very clear in terminology here, because ATC is generally
18 considered to be the posted value on the OASIS system associated with a company's
19 open-access transmission tariff, a measure of transmission available to customers for
20 service. ATC values are also generally determined and posted only for a projected period
21 of 13 months or less, and they reflect current or real-time conditions, which may often be

different than the forecast conditions used in the planning realm. The analysis done by PEC examined the expected increase to transmission capability on specific interfaces when the projects are expected to be placed in service. A similar analysis to the FCITC/SIL calculations was performed for the 2015/16 timeframe, and I will refer to this additional analysis as FCITC/ATC. The purpose was to determine the change in transmission capability resulting from the proposed projects. Based on the described approach, the resulting increases to FCITC/ATC interface capabilities are:

Summer 2015 DEC BAA to PEC-East BAA	550 MW
Summer 2015 PJM to PEC-East BAA	2328 MW

In other words, the ability to bring power into PEC- East from DEC is increased by 550 MW and from PJM by 2328 MW with the proposed projects implemented, when these interfaces are looked at independently.

Q. Please describe the methodology used in more detail.

A. Generally speaking, the methodology employed to determine the above impacts attempted to mimic the methodology employed to determine the ATC values posted in real time. Specifically, imports were increased into the PEC-East BAA by increasing the generation in the adjoining area (DEC or PJM in separate studies), and decreasing the generation in the PEC-East BAA. The PEC-East BAA generation was decreased in economic order, i.e., the most expensive generation was reduced first, in order to retain a system economic dispatch. This increase/decrease of generation was done until a single

1 contingency resulted in the overload of a facility, as described in the FCITC
2 methodology. The import limit is reached when the first facility limit is identified. The
3 FCITC/ATC value is identified as the import capability at that first limiting facility.

4 **Q. Does this conclude your testimony?**

5 **A.** Yes.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Duke Energy Corporation

Progress Energy, Inc.

)
)
)

Docket No. EC11-60-001

AFFIDAVIT OF SAMUEL S. WATERS

STATE OF NORTH CAROLINA

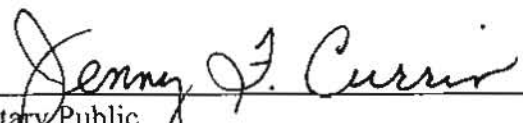
COUNTY OF WAKE

SAMUEL S. WATERS, being duly sworn, deposes and states that he prepared the Direct Testimony of Samuel S. Waters and that the statements contained therein and the Exhibits attached thereto are true and correct to the best of his knowledge and belief.



Samuel S. Waters

SUBSCRIBED AND SWORN TO BEFORE ME, this the 23rd day of March, 2012.



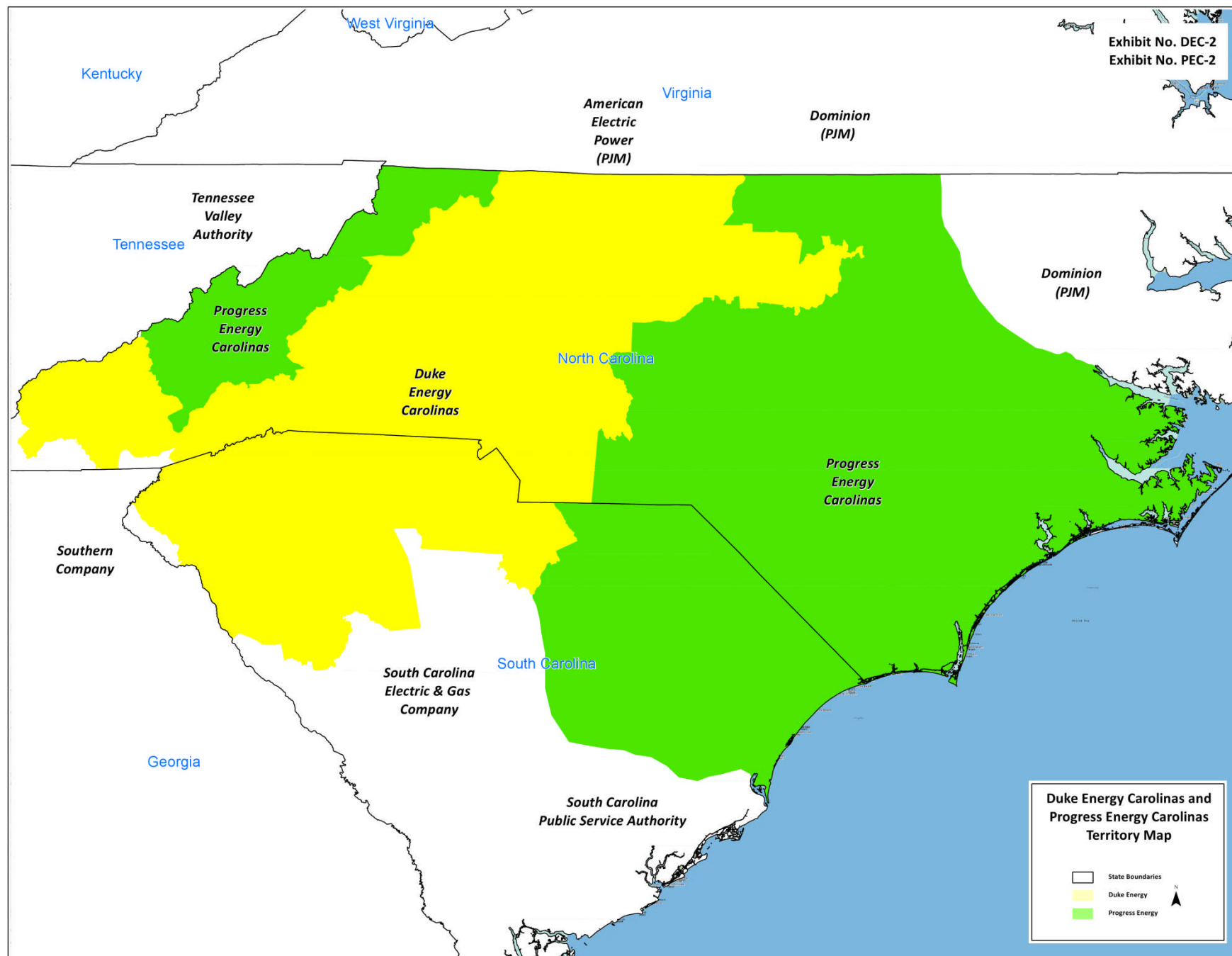
Notary Public

Printed Name: Jenny F. Currin

My Commission Expires: 12/13/2015



Exhibit No. DEC-2
Exhibit No. PEC-2



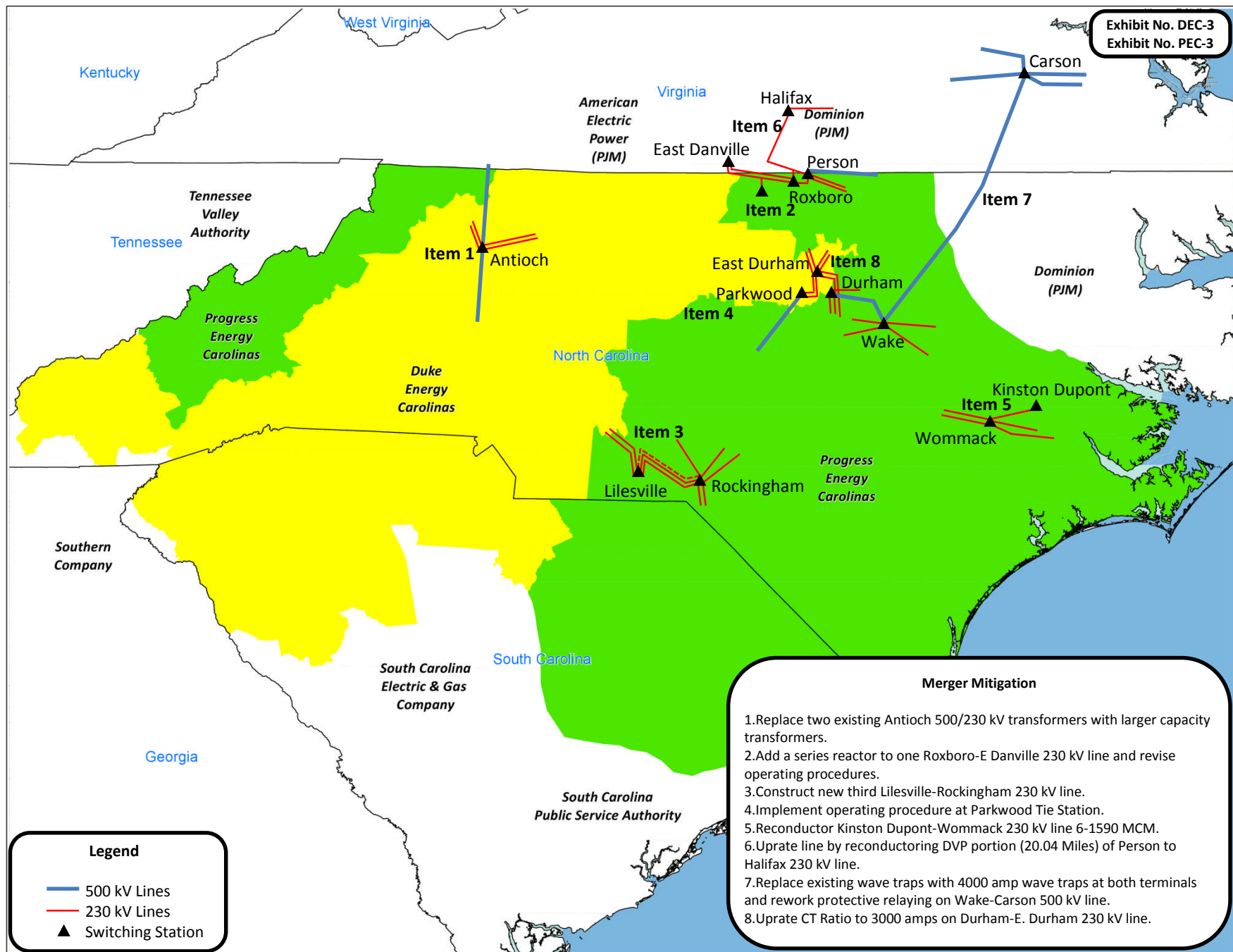


EXHIBIT B

TESTIMONY OF DR. WILLIAM H. HIERONYMUS

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Duke Energy Corporation

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Progress Energy, Inc.

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Docket No. EC11-60-001

Prepared Mitigation Testimony of William H. Hieronymus

Introduction and Summary

Q. Please state your name and business address.

A. My name is William H. Hieronymus. My address is Charles River Associates, Inc., 200 Clarendon Street, T-33. Boston, MA 02116.

Q. Have you testified previously in this proceeding?

A. Yes. My direct testimony on behalf of Applicants was filed on April 4, 2011. That testimony concerned the horizontal and vertical market power effects of the proposed transaction. I also provided an affidavit reporting the results of my analysis of the horizontal market power effects of the then-proposed mitigation measures on October 17, 2011.

Q. What is the purpose of your testimony at this time?

A. The purpose of my testimony at this time is to provide the Commission with an analysis of the horizontal market power effects of the mitigation that Applicants

1 now propose in response to the Commission's December 14, 2011 rejection of
2 Applicants' October 17, 2011 Compliance Filing.

3 Q. Would you please briefly overview the proposed mitigation?

4 A. Yes. The mitigation is composed of three parts. Of greatest importance is a
5 substantial increase in transmission into the Duke Energy Carolinas ("DEC") and
6 Progress Energy Carolinas East ("PEC East") Balancing Authority Areas
7 ("BAAs"). This is permanent structural mitigation that will add access to
8 substantially more competing capacity in the two BAAs than is lost as a result of
9 the merger eliminating a competitor. The second part of mitigation is an interim
10 virtual divestiture, consisting of firm sales of energy and capacity. The purpose
11 of the virtual divestiture is to bridge the period between closing the transaction
12 and the completion of the transmission expansion, expected to be up to three
13 years. The interim mitigation eliminates all of the screen failures found in the
14 Commission's Merger Order and has been designed to respond fully to the
15 Commission's criticisms of the virtual divestiture proposed by Applicants in their
16 October 17th filing. The third part is a proffered "stub" mitigation that would be
17 put in place only to the extent that the Commission believes that the transmission
18 expansion proposal does not constitute adequate mitigation. The stub mitigation
19 consists of a continuing set-aside of transmission capacity from the DEC BAA to
20 the PEC East BAA to anyone unaffiliated with the Applicants that requests firm
21 service of any duration. The set-aside would begin when interim mitigation ends
22 and continue for as long as the Commission requires. The amount of
23 transmission set aside is sufficient to cure the single small screen failure in the

1 PEC East BAA that my analysis shows remains after the transmission expansion
2 is completed notwithstanding the very large increase in transmission access that
3 is created. The set-aside is limited to the time period in which the screen failure
4 occurs, the Summer Off-Peak.

5 Q. Please summarize the results of your analyses.

6 A. In the analysis that the Commission relied on in the Merger Order, which based
7 prices on EQR data and the assumption that the depancaking of rates was a
8 merger-related detriment to competition, there were two screen failures in the
9 DEC BAA in the base and 10 percent down case and 5 screen failures in the 10
10 percent up case. In the PEC East BAA there was one screen failure in the base
11 and 10 percent down scenarios and 3 screen failures in the 10 percent up
12 scenario, all occurring in the summer.

13 Beginning with the interim mitigation, I demonstrate that the virtual divestiture
14 results in no screen failures in either the DEC or PEC East BAAs in any time
15 period in any of the three scenarios (base, 10 percent up, 10 percent down). As I
16 also shall discuss, the specific form of the virtual divestiture responds to the
17 Commission's criticisms of the earlier virtual divestiture offer, particularly in that
18 the sales are firm, that the identities of the buyers are known and reflected in the
19 analysis and that the monitoring arrangements are in place.

20 The transmission upgrades that constitute the permanent mitigation add access
21 to substantial amounts of competing capacity. In the DEC BAA, the First
22 Contingency Incremental Transfer Capability ("FCITC") underlying the SIL

1 increases from 2,300 MW to 4,830 MW in the summer and from 3,200 MW to
2 5,200 MW in the winter. The SIL differs from the FCITC in that the SIL adjusts
3 FCITC for net area interchange (“NAI”). Because NAI is not changed by the
4 transmission enhancements, the change in SIL is identical to the change in
5 FCITC.¹

6 In the summer season in which the screen failures in PEC East occurred in the
7 analysis relied on by the Merger Order, the increase in the SIL is from 2,100 MW
8 to 4,385 MW. There also is a more than 1,000 MW SIL increase in the winter,
9 when there were no screen failures before the expansion. Of course, some of
10 the increase in the DEC and PEC East SILs is allocated to the merging entities
11 as a result of transmission proration in the DPT, so that not all of the increase is
12 an increase in competing generation. Nevertheless, the increase in access to
13 competing capacity substantially more than offsets the loss of Duke Energy as a
14 competitor in the PEC East BAA and Progress Energy Carolinas in the DEC
15 BAA. The net increase in access to competing capacity (after removing the
16 shares allocated to Duke Energy) in the PEC East market is as much as 2,000
17 MW in some summer peak seasons and at least 1,300 MW in other summer
18 periods. This can be compared to a range of zero to 755 MW of pre-merger
19 Duke Energy Available Economic Capacity (“AEC”) in the PEC East market (at
20 most 543 MW in the summer season in which screen failures occurred) in the
21 analysis relied on in the Merger Order. In the DEC BAA, the increased supply

¹ NAI has the same meaning as the “Net Scheduled Interchange” in Mssrs. Waters’ and Ernst’s testimonies.

1 from competing sellers ranges from about 2,400 MW on-peak to about 1,900 MW
2 off-peak in the summer and about 2,000 MW on-peak and 1,600 MW off-peak in
3 the winter. In the analysis used in the Merger Order the range of Progress
4 Energy Carolinas pre-merger AEC in the DEC BAA was zero to 318 MW.
5 Hence, the transmission upgrades result in wholesale customers located in the
6 Applicants' BAAs having access to substantially more competing capacity than
7 before the merger and access to new competing capacity that is several times
8 the competing capacity lost as a result of the merger.

9 Despite the increase in access to competing capacity, there remains a single
10 screen failure, in the off-peak summer period in the PEC East BAA. This occurs
11 in the base case. The post-mitigation market is only moderately concentrated
12 with an HHI of 1,402 and the change in HHI is 101, barely above the 100 point
13 threshold. To put this in proper perspective, if Duke Energy were allocated about
14 5 MW less into the PEC East market, the HHI change would be reduced to below
15 100 points.

16 The stubbornness of this screen failure is surprising in view of the fact that
17 permanent mitigation significantly enlarges the PEC East market and far more
18 than replaces the loss of Duke Energy as a competitor. While the failure is
19 trivially small, I had expected it to disappear, as did the failures in the DEC BAA.
20 Its persistence arises primarily from the fact that the increase in the PEC East
21 SIL also increases the amount of Duke Energy AEC that is allocated into the
22 PEC East BAA. Thus, the transmission improvements designed to increase
23 competing capacity also increase the amount of imports attributed to Applicants.

1 Hence, while mitigation has the intended effect of diluting the market share
2 attributable to Progress Energy Carolina's generation located within the PEC
3 East BAA, it also increases the amount of Duke Energy generation deemed to
4 participate in the PEC East market. Of course, it does not make the market less
5 competitive for wholesale customers to have access to more Duke Energy
6 generation along with more competing generation. This phenomenon does,
7 however, substantially increase the amount of transmission mitigation required to
8 cure screen failures.

9 My recommendation is that the Commission should approve the merger based
10 solely on the interim mitigation and permanent transmission expansion
11 mitigation. If, however, the Commission determines that additional mitigation is
12 required to eliminate this single, two point, off-peak screen failure, only a slight
13 amount of additional mitigation, beyond the proposed transmission
14 enhancements, would be required. For this reason, to the extent that the
15 Commission determines that additional mitigation is required, Applicants would
16 offer the "stub" mitigation transmission set-aside proposal, which will give non-
17 affiliated suppliers access priority to firm transmission from DEC to PEC East in
18 the summer off-peak period in which the failure occurs. My analysis of the stub
19 mitigation demonstrates that when the set aside transmission is allocated pro
20 rata to others in a manner consistent with how the DPT screens are performed,
21 the screen failure is indeed eliminated.

1 **Mitigation Requirements**

2 Q. What guidance has the Commission given Applicants about what must be done
3 to allay the Commission's horizontal market power concerns relating to this
4 transaction?

5 A. The Commission guidance is in two Orders: The Order on Disposition of
6 Jurisdictional Facilities and Merger (the "Merger Order"), dated September 30,
7 2011, and the Order Rejecting Compliance Filing (the "Compliance Order") dated
8 December 14, 2011.

9 Q. What instruction did the Merger Order give concerning mitigation?

10 A. The Merger Order found that the transaction would result in "significant screen
11 failures in the horizontal market power analysis" and conditioned its approval of
12 the transaction on its subsequent approval of mitigation measures to be
13 proposed by Applicants. It further indicated that acceptable forms of mitigation
14 could include joining a Regional Transmission Organization ("RTO"),
15 implementing an independent coordinator of transmission arrangement,
16 generation divestiture, virtual divestiture and/or transmission upgrades.
17 Applicants were invited to make a compliance filing proposing mitigation "that
18 would be sufficient to remedy the screen failures identified below."

19 Q. On what basis did the Commission conclude that, without mitigation, the merger
20 would result in a market power problem in the DEC and PEC East BAAs?

A. In its discussion, the Commission placed primarily reliance on the AEC screens provided in response to a Staff request for screen results based on Electric Quarterly Reports (“EQR”) prices and treating rate depencaking as merger-related. The Commission found that there were 3 screen failures in the DEC BAA base case, 5 failures in the 10 percent up case and 2 failures in the 10 percent down case.² Moreover, most of the failures were in highly concentrated markets in which Applicants’ market share was high. In the PEC East market, there was 1 failure in the base case, 3 failures in the 10 percent up case and 1 in the 10 percent down case. These markets generally were only moderately concentrated, but Applicants’ post-transaction shares were relatively high. There were no failures in the Progress Energy Carolinas-West BAA.

Q, What standard did the Commission apply in concluding that these screen failures were a cause for concern?

A. The Commission stated that it “is normally concerned with cases where there are systematic screen failures, where screen failures ‘present a consistent pattern across time periods and/or markets.’ The Commission has indicated that systematic screen failures in markets that are highly concentrated and where an entity seeking authorization has a significant share of the market are a cause for concern.”³ The Commission then concluded that those conditions were present in the DEC market, primarily based on the fact that screen failures occurred in all three scenarios and in both winter and summer seasons. In the PEC East

² There were no failures in the shoulder months.

³ Merger Order, P 134.

1 market, the Commission appears to have relied on the facts that there was at
2 least one screen failure in each of the scenarios and in three of the four summer
3 time periods in the 10 percent up scenario.

4 Q. Do you conclude from this that Applicants are required to eliminate all of the
5 screen failures in all of the markets in all of the scenarios?

6 A. No. However, out of an abundance of caution, Applicants have designed
7 mitigation (the “stub” mitigation) to cure the last remaining screen failure in the
8 event that the Commission determines such mitigation to be necessary. The
9 whole logic of the Commission’s finding of a market power concern in the Merger
10 Order is based on the existence of “systematic screen failures” or a “consistent
11 pattern” of screen failures. I recognize that there is no bright-line test of
12 “systematic.” However, one failure in one scenario in one market/time period
13 cannot be systematic. This is particularly true given that the screen failure is
14 relatively minor (an HHI change of 101, only 2 points above the threshold).
15 Further, the failure occurs in an off-peak period when it is difficult to use the
16 baseload generation that predominates in off-peak markets to execute a
17 profitable withholding strategy.

18 Q. Is there any additional reason to conclude that Applicants’ proposed permanent
19 mitigation should be accepted despite the single small screen failure?

20 A. Yes. As I have discussed, Applicants have proposed transmission
21 enhancements that far more than replace the loss of Duke Energy as a
22 competitor in the PEC East market. In the time period in which the screen failure

1 remains, the loss of 543 MW of competition from Duke Energy is replaced by
2 1,887 MW of new competing capacity.⁴

3 Q. Does the Compliance Order provide any more guidance on this point?

4 A. No. The rejection of the proposed mitigation was not based on the number or
5 size of screen failures that might remain (there were none), but on specific
6 characteristics of the virtual divestiture and the assumptions made in the analysis
7 concerning the sale of the virtually divested energy.

8 **Interim Mitigation**

9 Q. In your summary you noted that Applicants' mitigation relies on transmission
10 system expansion and that the time required to achieve the expansion creates a
11 need for interim mitigation. The Revised Compliance Filing explains the various
12 aspects of the interim mitigation, including the size, nature and duration of it as
13 well as the role of the Independent Monitor. What aspects of the mitigation are
14 relevant to your analysis of its effects on the DPT?

15 A. In the Compliance Order, the Commission did not dispute that the amount of
16 mitigation then proposed would be sufficient to cure the screen failures under the
17 assumptions contained in my analysis. However, the Commission found that
18 some of those assumptions might not be valid. In particular, it found that
19 Applicants' assumption that the mitigation energy would be sold equally to two
20 new entrants was potentially essential in demonstrating that screen failures

⁴ This is computed as the 2,285 MW of additional SIL minus the share of the increase allocated to Duke Energy, which is 398 MW.

1 would be cured and that the assumption was unsupported. The Commission
2 also voiced concerns about limitations Applicants had placed on who could
3 acquire the energy and on the nature of the product and concluded that the
4 product might go unsold and hence that Applicants would not relinquish control of
5 the supplies.

6 Applicants have substantially revised the mitigation to take these and other
7 concerns into account. The changes are detailed in the Revised Mitigation Filing.
8 Applicants also have limited the role of the virtual divestiture to interim rather than
9 primary mitigation. Among other things, this moots the Commission's concern
10 with the 8-year limit on the term of the virtual divestiture that Applicants had
11 proposed in their initial mitigation filing.

12 The attributes of the now-proposed interim mitigation that matter to my DPT
13 analysis are:

- 14 • Quantity. The quantities were calculated by computing the amount that
15 was required to cure all of the screen failures, assuming that the divested
16 amounts are properly attributed to the actual buyers of divested energy.
17 Mitigation quantities have been rounded up to create standard products
18 (*i.e.*, units of 25 MW for light load and heavy load periods). In the DEC
19 BAA, the quantities are:
 - 20 ○ Summer Peak – 150 MW
 - 21 ○ Summer Off-Peak – 300 MW
 - 22 ○ Winter Peak – 25 MW

- Winter Off-Peak – 225 MW

In the PEC East BAA, the quantities are:

- Summer Peak – 325 MW
- Summer Off-Peak – 500 MW

- The party to whom the divested capacity and energy is sold. Applicants have identified the specific parties to whom the divested capacity is sold and the amounts each is purchasing. The buyers are Cargill Power Markets, LLC, EDF Trading North America, LLC, and Morgan Stanley Capital Group, Inc, and the amounts of their purchase obligations are shown on Exhibit WHH-1. These buyers do not own or control any generation capacity in the two BAAs, and do not own or control sufficient amounts of capacity in interconnected BAAs to result in material shares of capacity in those BAAs. Since I know who the buyers are, I have been able to perform the DPT based on their specific circumstances and have confirmed that the screens are passed with the divested capacity being sold to these specific buyers.
- The indicia of a change in control. With virtual divestiture the key issue is whether the power sales eliminate the seller's ability to use the capacity at issue to raise prices or to benefit with respect to the capacity from raising prices by withholding other capacity. The fact that the sale is firm must-sell, must-take at prices established before the transaction is completed meets that criterion.

- The strike price of the sale. The heat rates at which the divested generation is priced are reflected in Exhibit WHH-1, which summarizes the interim divestiture proposal quantitative characteristics. I have confirmed that these heat rates make the divested capacity “economic” in the context of the DPT. That is, at the heat rates and fuel costs underlying the model relied on in the Merger Order, Applicants are selling capacity that qualifies as AEC and hence cures the screen failures. I note further that since the sale is a firm sale, there can be no concern that the price could cause the buyer to not take the energy and capacity and hence leave it with the Applicants.

Q. How have you analyzed the interim mitigation proposal?

A. I have used the same model and data that the Commission relied on in its Merger Order to analyze the transaction on a post-interim mitigation basis. Specifically, the analyses relied on are the model runs requested by Staff on August 22, 2011 that based the base case and scenario DPTs on EQR prices. Beginning from this starting point of the analysis that the Commission relied on in the Merger Order, all that is changed is to reassign the capacity amounts of the virtually divested capacity from the Applicants to the actual buyers.

Q. What does your analysis show for the DEC BAA?

A. My analysis is summarized in Exhibit WHH-2. This analysis shows the pre-merger HHIs, the post-merger HHIs and the post interim mitigation HHIs and changes in HHIs for all three scenarios and all 10 time periods. There are no

1 screen failures. In the base case, the HHI changes relative to the pre-merger
2 HHI are negative in both of the time periods in which screen failures had
3 occurred. In the 10 percent up price sensitivity, the HHI changes are negative in
4 the three summer time periods in which screen failures had occurred. In the
5 winter period where a screen failure had occurred, the HHI change is 47, below
6 the bottom of the 50-100 point range signaling a basis for concern. In the 10
7 percent down price sensitivity, the HHI change is negative in both off-peak
8 periods in which screen failures had occurred.

9 Q. What does your analysis show for the PEC East BAA?

10 A. These results are shown in Exhibit WHH-3 which parallels WHH-2. In the base
11 case, there had been a screen failure in one time period. The virtual divestiture
12 results in a small negative change in the HHI relative to the pre-merger case, so
13 the screen is quite comfortably passed. In the 10 percent up price sensitivity,
14 there had been three screen failures, all in the summer. In the Super-Peak-2
15 period and off-peak period, the HHI changes are negative. In the Peak period,
16 the HHI change is positive and substantial, but the post-mitigation HHI is less
17 than 1,000, so the screen still is passed. In the 10 percent down price sensitivity,
18 the HHI change is negative in the one period in which a screen failure had
19 occurred.

20 Q. What do you conclude concerning interim mitigation based on these analyses?

21 A. These analyses demonstrate that the interim mitigation eliminates all of the
22 screen failures that had caused the Commission to be concerned in its Merger

1 Order and hence should be sufficient mitigation for the interim period to which it
2 applies.

3 **Permanent Mitigation**

4 Q. Applicants are proposing to use transmission expansion as the permanent or
5 non-interim mitigation of the effects of the transaction. Have you summarized
6 what they are proposing to do in a manner that reflects how it is used in your
7 DPT analyses?

8 A. Yes. The transmission enhancements and the analysis of the interface
9 capacities that they create are discussed extensively in the testimonies of
10 Samuel S. Waters and Henry Edwin Ernst, Jr. The elements of their analysis
11 that must be abstracted for use in my DPT analyses are shown in Exhibit WHH-
12 4.

13 The first block of the exhibit shows the increase in the FCITCs underlying the
14 SILs for the PEC East and DEC BAAs for each season. The increases are very
15 substantial, particularly in the summer, the only season in which a screen failure
16 occurred in the PEC East BAA in the merger analysis relied on by the
17 Commission. The winter upgrades are also substantial.

18 The second block of the exhibit shows the SIL values. SIL values differ from
19 FCITC values to reflect NAI. Since NAI is not changed as a result of the
20 enhancements, the increase in the SIL values is equal to the increase in the
21 FCITCs. For PEC East, the size of the NAI is such that the SIL exceeds the
22 FCITC, while for the DEC BAA the NAI makes the SIL slightly less than the

1 FCITC. For PEC East, the summer SIL is nearly doubled, increasing from 2,637
2 MW to 4,922 MW.⁵ The winter SIL increases by about 25 percent, to 6,063 MW.
3 There also is a small increase in the shoulder SIL. For the DEC BAA, the
4 summer SIL is more than doubled, from 2,279 MW to 4,809 MW. There also is a
5 large increase in the winter SIL, from 3,011 MW to 5,011 MW. There are no
6 increases in the shoulder SIL.⁶ However, there were no shoulder screen failures.

7 The third block of the exhibit shows the path limits for the interfaces affected by
8 the transmission upgrades. The model that I use for DPT analyses, CASm, has
9 a relatively rich transmission taxonomy. While the increase in imports from a
10 transmission upgrade is limited overall by the increase in the SIL, the distribution
11 of the increase among suppliers depends on which interfaces are impacted by
12 the upgrades. In this case, all of the enhancements increase the interface
13 capability between PJM and the two Applicants, or between the two Applicants.
14 None affect ATCs into Applicants' BAAs from other BAAs. Hence, the post-
15 mitigation SIL will be distributed differently among external suppliers than was
16 the pre-mitigation SIL. Suppliers in PJM and DEC will have a higher share, and
17 suppliers in, for example, the Southern BAA, will have lower shares. Since

⁵ In performing my analysis, I discovered that the pre-merger and pre-mitigation SIL values provided to me for use in my initial analysis reflected rounding the FCITCs down to the nearest 100 MW. I then adjusted these rounded values for the NAI to arrive at the SIL. It would have been slightly more accurate to have used the unrounded FCITCs as I have done in the analysis submitted with this testimony. It should be noted that the results induced by rounding slightly decreased the market size in the initial merger testimonies and hence slightly increased Applicants' market shares. Hence, the use of rounded values was an unintended conservatism.

⁶ The lack of change in the shoulder SIL is because the bottlenecks relieved by the transmission upgrades are not the limiting elements in the shoulder seasons.

1 Applicants own no generation in these markets for which shares are decreased,
2 this increases the amount of mitigation required to cure the screen failures.

3 The fourth block of the exhibit shows the differences between the increased ATC
4 amounts calculated in the transmission planning models relied on and described
5 in Mssrs. Waters' and Ernst's testimonies and the increases shown in the
6 previously described third block that were used in the CASm model. The
7 difference reflects the extent, if any, by which the increases in contract path limits
8 are less than the ATC increases. The source of contract path information is
9 described in Mr. Waters' and Mr. Ernst's testimonies.

10 Q. Please describe the results of your analysis of the transmission enhancements
11 and their effects on the DPT screens for the DEC BAA.

12 A. These results are shown on Exhibit WHH-5. The exhibit summarizes a complete
13 AEC DPT analysis based on the price scenarios that the Commission relied on in
14 the Merger Order. The three blocks are for the base case, the 10 percent up
15 price sensitivity and the 10 percent down price sensitivity respectively. The
16 exhibit shows that, without exception, all of the screen failures for the DEC BAA
17 are eliminated. For example, in the base case, the two screen failures were in
18 the Summer Off-Peak and Winter Off-Peak periods. This is shown in the "Post-
19 Merger" columns, with a Summer Off-Peak market share of 62.4 percent, an HHI
20 of 3,963 and an HHI increase of 529. In the winter, the share is 46.3 percent, the
21 HHI is 2,262 and the change in HHI is 299. Post-mitigation, the Summer Off-
22 Peak market share drops to 47.8 percent and the HHI to 2,391. The change in

1 HHI relative to the pre-merger market is minus 1,043. Hence the transmission
2 upgrades not only eliminate the screen failure, they make the market
3 substantially less concentrated than it was before the merger. The winter result
4 is similar. Not only is the screen failure eliminated but the HHI is reduced to the
5 extent that a market that was highly concentrated before the merger is only
6 moderately concentrated after the merger, once mitigation is taken into account.

7 Q. What are the results for the two price sensitivities?

8 A. The results for the two price sensitivities are similar. In the 10 percent up case,
9 there were five screen failures resulting in four highly concentrated markets. In
10 each of the five cases, mitigation not only eliminates the screen failures but also
11 reduces the HHIs to substantially below the pre-merger levels. Post mitigation,
12 there is only one highly concentrated time period, three less than before
13 mitigation and also three less than before the merger. In that period, the HHI is
14 1,000 points lower than the pre-merger HHI. In the 10 percent down case, HHIs
15 are less than pre-merger except for two time periods where there are very slight
16 increases in very unconcentrated markets. Pre-merger there were two highly
17 concentrated time periods and two moderately concentrated periods. Post
18 mitigation there are no highly concentrated periods and only two moderately
19 concentrated periods. Both of these are substantially less concentrated than
20 before the merger.

1 Q. Where are the results of the DPT for the PEC East market?

2 A. These are contained in Exhibit WHH-6. The structure of this exhibit is identical to
3 Exhibit WHH-5, with blocks showing the pre-merger, post-merger-pre-mitigation
4 and post-mitigation analyses.

5 Q. What are the results of mitigation for the base case?

6 A. In the initial merger analysis, the PEC East market was substantially less
7 concentrated than the DEC market both pre-merger and post-merger. There was
8 only one time period pre-merger when the market was moderately concentrated
9 and none when it was highly concentrated. Post-merger, the moderately
10 concentrated time period, the Summer Off-Peak, became highly concentrated,
11 with the HHI going from 1,301 to 2,194.

12 The transmission enhancements essentially return the situation to pre-merger
13 conditions, with only one period that is moderately concentrated and no highly
14 concentrated periods. However, there still is just enough of an increase in
15 concentration to cause a minor screen failure, with the Summer Off-Peak HHI
16 going from 1,301 to 1,402. As I noted previously, the relatively small size of the
17 screen failure is illustrated by calculating how many MW of imports from Duke
18 Energy would need to be eliminated to cure the screen failure, which is only 5
19 MW.

20 Q. What are the results for the two sensitivities?

1 A. There are no screen failures in either sensitivity. In the 10 percent up case,
2 without mitigation there were three screen failures, all in the summer. Post-
3 mitigation, the two time periods that had gone from unconcentrated to moderately
4 concentrated are returned to being unconcentrated. The Summer Off-Peak time
5 period, which had moved from moderately to highly concentrated, is returned to
6 being moderately concentrated and the HHI change is only 22 points.

7 In the 10 percent down period prior to mitigation there had been a screen failure
8 in the Summer Off-Peak period as a result of the merger, albeit the market
9 remained only moderately concentrated as it had been pre-merger. The
10 transmission expansion lowers the HHI to substantially below pre-merger levels,
11 so that the market becomes unconcentrated. Indeed, in this scenario, the post-
12 mitigation market is unconcentrated in all time periods.

13 Q. You reported earlier that the transmission expansion increases access to
14 competitive supplies relative to pre-merger. Please elaborate.

15 A. Transmission expansions may be viewed as having two effects, which the
16 Commission has recognized in past orders. One effect, which I primarily have
17 focused on here, is that, as a result of market expansion, screen failures are
18 eliminated. However, the second, and at least equally important effect, is that
19 the market expansion fully – or even more than fully – replaces the reduction in
20 competitive supply resulting from the loss of a competitor. As I described earlier,
21 the net increase in access to competing capacity (after taking into consideration
22 shares allocated to Applicants) far exceeds the loss of previously-competing

1 supply arising from the merger. As a result, the transmission upgrades give
2 wholesale customers located in the Applicants' BAAs access to substantially
3 more competing capacity than before the merger. Both the market expansion
4 and the increase in rival capacity are shown in Exhibit WHH-7.

5 Exhibit WHH-7 shows the calculation of the amount of the increase in access to
6 competing generation in the seasons in which screen failures had occurred in the
7 analysis relied on by the Merger Order, the summer season for the PEC East
8 BAA and the summer and winter for the DEC BAA. In the base case, the
9 increase in access to rival capacity in the DEC BAA is between 1,900 MW and
10 2,400 MW in the summer and between 1,700 MW and 2,000 MW in the winter.

11 The results for the two sensitivities are similar. In the PEC East BAA, the access
12 to rival capacity in the summer increases by between 1,300 MW and 2,100 MW.
13 Results for the 10 percent up price sensitivity scenario are similar. In the 10
14 percent down scenario, the range is narrower, from 1,850 MW to 2,200 MW.

15 Thus, after the merger and the transmission expansions, wholesale customers in
16 the Applicants' BAAs will have access to approximately 50 to 100 percent more
17 competitive supply than before the merger. Stated somewhat differently, the
18 increase in competing supplies is several times the competing capacity that is
19 lost as a result of the merger. This fact alone demonstrates that the mitigation
20 package makes the markets more competitive than before the merger.

21 **“Stub” Mitigation**

22 Q. Please describe the purpose of the “stub” mitigation.

1 A. As I discussed previously, completion of the transmission enhancements
2 designed to mitigate the horizontal market power effects of the merger solves all
3 but one small screen failure, an HHI change of 101 in a moderately concentrated
4 market, specifically the Summer Off-Peak period in the PEC East market.
5 Applicants have designed the stub mitigation as a way of resolving the small off-
6 peak screen failure in the event that the Commission determines that additional
7 mitigation is required.

8 Q. What is the proposed stub mitigation?

9 A. Applicants propose to set aside 25 MW of transmission on the DEC-PEC East
10 interface. As I shall demonstrate, the amount of set-aside required to solve the
11 screen failure is less than this. The size of the set-aside was chosen partly to be
12 conservative and partly so that it will match the size of standard energy products.
13 Applicants will not reserve transmission on a firm basis in amounts that reduce
14 the amount of transmission from the DEC to PEC East BAAs then-available to
15 others below 25 MW. As third-parties reserve new firm transmission across the
16 interface, the set aside will be reduced commensurately (that is, a portion of the
17 set aside will be "used up" by being allocated to a specific third party). A part of
18 the set-aside commitment is that the Applicants will not assert native load priority
19 with respect to the set aside. These commitments will be monitored by an
20 independent monitor. While Applicants will continue to have a non-discriminatory
21 right to use this capacity on a non-firm basis, the capacity can be claimed by any
22 unaffiliated party that makes a firm reservation of any duration. If the
23 Commission chooses to require the stub mitigation, it will begin at the time that

1 the interim mitigation ends, which implicitly is also after the transmission
2 enhancements are completed.

3 Q. How have you modeled the stub mitigation?

4 A. The basic method of transmission allocation in DPT analyses is to prorate
5 available transmission capacity among the Available Economic Capacity (or
6 Economic Capacity if relevant) of all suppliers with supplies in the BAA(s) behind
7 the interface. This includes capacity allocated into the BAA from behind the
8 interface from its first tier BAAs other than the BAA that is the target market for
9 the DPT. The exception to this proration arises from either firm reservations or
10 native load priority. In the instant case, there is no party with an ongoing firm
11 reservation for this new capacity, so there is no single party to whom it can be
12 allocated. Hence, the capacity is subject to proration. However, since all other
13 potential users can, by making a firm reservation, take any proratable capacity
14 away from Duke Energy, all other potential users have priorities ahead of Duke
15 Energy. Hence, the proration should be among all other suppliers (including
16 imports from other BAAs) that have supplies within the DEC BAA that can
17 compete to sell into the PEC East BAA.

18 This is what I have implemented. The set aside amount is prorationed only
19 among suppliers with capacity behind the interface that are not affiliated with the
20 Applicants. The remainder of capacity that is not subject to the set-aside, both
21 existing and newly existent as a result of the permanent mitigation, is prorationed
22 among all such suppliers including Duke Energy.

1 Q. Does your analysis confirm that the set aside resolves the screen failure?

2 A, Yes. This result is shown on Exhibit WHH-8. There had been a single screen
3 failure in the Summer Off-Peak period. The exhibit shows that the failure is
4 eliminated, *i.e.*, that the HHI increase is less than 100 points. The analysis also
5 confirms that the size of the screen failure in MW had been very small. The stub
6 mitigation reduces Duke Energy's share of the PEC East market by 13.5 MW and
7 this is enough to lower the HHI increase to below 100 points.

8 **Conclusions and Recommendation**

9 Q. What do you conclude, and what recommendation do you make to the
10 Commission on the basis of the analyses you have described?

11 A. In the Merger Order, the Commission conditionally approved the transaction,
12 subject to Applicants proposing mitigation that resolves the horizontal market
13 power problems that it identified in the Order. The Commission subsequently
14 rejected the mitigation previously proposed by the Applicants. Applicants now
15 have entirely revised the approach to mitigation. The virtual mitigation is now
16 only an interim mitigation and has been revised to moot the Commission's
17 criticisms of the initial version. I have shown that the interim mitigation eliminates
18 all screen failures in the interim period and I recommend that the Commission
19 find that this is so.

20 Applicants' permanent mitigation consists of massive increases in transmission
21 capacity into the two BAAs in which screen failures had occurred in the DPT that
22 the Commission relied on in the Merger Order. These increases far more than

1 offset the amount of competing capacity lost as a result of the merger. It also
2 resolves all of the screen failures in all of the price scenarios in the DEC BAA
3 and all but one small off-peak screen failure in the PEC East BAA. A single,
4 small screen failure in a moderately concentrated off-peak market hardly
5 constitutes systematic screen failures, the Commission's stated basis for market
6 power concerns arising from DPT analyses. I therefore recommend that the
7 Commission find that the permanent mitigation resolves its market power
8 concerns expressed in the Merger Order.

9 In the event that the Commission finds that the transmission expansion by itself
10 is not adequate as a result of the remaining small screen failure, Applicants have
11 devised a stub mitigation consisting of a permanent set aside of transmission that
12 can be reserved only by competing generators in the market and time period in
13 which the remaining screen failure occurs. I have demonstrated that the stub
14 mitigation indeed does cure the screen failure. While my primary
15 recommendation is that the Commission not require the stub mitigation, I
16 recommend that if the Commission determines that all screen failures must be
17 eliminated, that it find that the stub mitigation eliminates the screen failure.

18 Q. Does this complete your testimony?

19 A. Yes, it does.

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Duke Energy Corporation

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Docket No. EC11-60-001

)

Progress Energy, Inc.

)

Verification of William H. Hieronymus

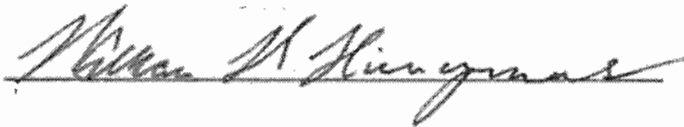
City of Boston, Suffolk County

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Commonwealth of Massachusetts

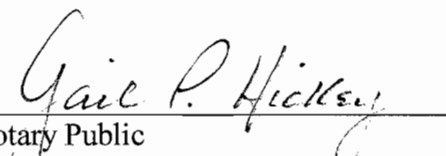
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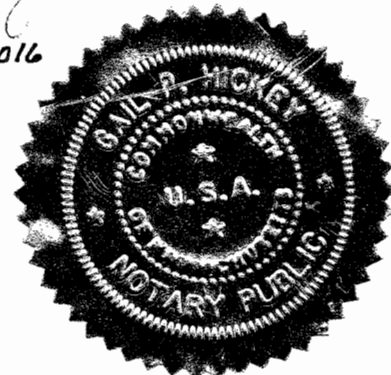
I, William H. Hieronymus, being duly sworn, depose and state that the foregoing Affidavit and Exhibits of the undersigned is true, correct, accurate and complete to the best of my knowledge, information and belief.



William H. Hieronymus

Subscribed and sworn to before me this the 23rd day of March 2012.


Notary Public
Commission Exp. 7-22-2016



Interim Mitigation Sales Divestiture Commitments

Duke Energy Carolinas BAA (DUK)

	MW	Heat Rate (btu/kWh)	Buyer(s)		
			Cargill	EDF	MS
Summer On-Peak	150	10,000	150	0	0
Summer Off-Peak	300	7,000	300	0	0
Winter On-Peak	25	8,950	25	0	0
Winter Off-Peak	225	7,000	225	0	0

Progress Energy Carolinas East BAA (CPLE)

	MW	Heat Rate (btu/kWh)	Buyer(s)		
			Cargill	EDF	MS
Summer On-Peak	325	10,000	100	100	125
Summer Off-Peak	500	7,000	100	100	300

Interim Mitigation

Post-Mitigation Screen Results, Available Economic Capacity

Duke Energy Carolinas BAA

	Base Prices							
	Pre-Merger HHI	Post-Merger			Post-Mitigation			
		Market	HHI		Divested	Market	HHI	
		Share	HHI	Chg.	MW	Share	HHI	Chg.
S_SP1	1126	26.3%	1126	-	150	22.5%	951	(175)
S_SP2	2277	46.5%	2349	72	150	43.3%	2066	(211)
S_P	1815	41.0%	1813	(2)	150	36.9%	1514	(301)
S_OP	3434	62.4%	3963	529	300	56.0%	3236	(199)
W_SP	405	1.4%	378	(27)	25	1.4%	371	(35)
W_P	1091	31.3%	1168	76	25	30.7%	1132	41
W_OP	1963	46.3%	2262	299	225	42.4%	1933	(30)
SH_SP	1472	36.4%	1475	3	0	36.4%	1475	3
SH_P	460	0.6%	494	35	0	0.6%	494	35
SH_OP	371	0.9%	402	31	0	0.9%	402	31

	Price increase 10%							
	Pre-Merger HHI	Post-Merger			Post-Mitigation			
		Market	HHI		Divested	Market	HHI	
		Share	HHI	Chg.	MW	Share	HHI	Chg.
S_SP1	1131	26.7%	1137	5	150	22.9%	959	(172)
S_SP2	2332	48.8%	2567	235	150	44.7%	2194	(137)
S_P	2722	52.4%	2866	144	150	48.7%	2509	(213)
S_OP	3475	63.1%	4047	572	300	56.9%	3335	(140)
W_SP	554	17.5%	560	6	25	16.7%	533	(21)
W_P	1090	32.0%	1202	112	25	31.5%	1166	76
W_OP	2014	47.7%	2394	380	225	43.9%	2062	47
SH_SP	1779	38.4%	1779	-	0	38.4%	1779	-
SH_P	464	3.4%	446	(17)	0	3.4%	446	(17)
SH_OP	642	21.0%	791	149	0	21.0%	791	149

	Price decrease 10%							
	Pre-Merger HHI	Post-Merger			Post-Mitigation			
		Market	HHI		Divested	Market	HHI	
		Share	HHI	Chg.	MW	Share	HHI	Chg.
S_SP1	786	1.6%	789	3	150	1.4%	732	(54)
S_SP2	1488	32.6%	1489	1	150	28.7%	1264	(224)
S_P	1820	41.1%	1826	6	150	37.0%	1527	(293)
S_OP	2027	47.8%	2427	400	300	39.5%	1757	(269)
W_SP	400	0.0%	385	(15)	25	0.0%	378	(22)
W_P	516	16.8%	555	39	25	16.1%	532	16
W_OP	1530	40.0%	1756	227	225	35.7%	1455	(75)
SH_SP	393	0.0%	404	11	0	0.0%	404	11
SH_P	432	0.9%	348	(85)	0	0.9%	348	(85)
SH_OP	405	0.1%	387	(18)	0	0.1%	387	(18)

Interim Mitigation

Post-Mitigation Screen Results, Available Economic Capacity

Progress Energy Carolinas East BAA

Base Case								
	Pre-Merger HHI	Post-Merger			Post-Mitigation			
		Market Share	HHI	HHI Chg.	Divested MW	Market Share	HHI	HHI Chg.
S_SP1	524	4.0%	476	(48)	325	3.1%	422	(102)
S_SP2	590	25.6%	897	307	325	13.5%	473	(116)
S_P	368	8.7%	392	24	325	7.3%	350	(18)
S_OP	1301	45.4%	2194	894	500	33.1%	1290	(11)
W_SP	466	2.0%	393	(73)	0	2.0%	388	(78)
W_P	336	13.5%	431	96	0	13.4%	424	89
W_OP	568	28.2%	992	424	0	27.1%	931	363
SH_SP	413	6.6%	430	17	0	6.6%	430	17
SH_P	447	0.8%	498	51	0	0.8%	498	51
SH_OP	381	4.2%	412	32	0	4.2%	412	32

Price increase 10%								
	Pre-Merger HHI	Post-Merger			Post-Mitigation			
		Market Share	HHI	HHI Chg.	Divested MW	Market Share	HHI	HHI Chg.
S_SP1	465	5.4%	441	(24)	325	4.2%	392	(73)
S_SP2	699	31.1%	1170	471	325	19.7%	635	(64)
S_P	729	35.3%	1445	715	325	26.8%	939	210
S_OP	1379	45.5%	2205	826	500	33.6%	1321	(58)
W_SP	394	1.7%	409	15	0	1.7%	404	11
W_P	353	14.0%	452	100	0	13.9%	447	95
W_OP	598	27.8%	988	391	0	26.8%	935	338
SH_SP	443	8.9%	421	(22)	0	8.9%	421	(22)
SH_P	460	10.3%	451	(9)	0	10.3%	451	(9)
SH_OP	822	26.6%	932	110	0	26.6%	932	110

Price decrease 10%								
	Pre-Merger HHI	Post-Merger			Post-Mitigation			
		Market Share	HHI	HHI Chg.	Divested MW	Market Share	HHI	HHI Chg.
S_SP1	567	1.5%	517	(50)	325	1.3%	449	(118)
S_SP2	485	4.6%	440	(45)	325	2.7%	394	(91)
S_P	339	8.1%	367	28	325	6.8%	331	(8)
S_OP	1198	35.4%	1423	224	500	26.5%	925	(273)
W_SP	524	0.0%	445	(79)	0	0.0%	441	(83)
W_P	474	5.1%	425	(49)	0	5.1%	420	(53)
W_OP	495	20.1%	655	160	0	19.1%	613	117
SH_SP	375	0.0%	410	36	0	0.0%	410	36
SH_P	423	1.0%	405	(18)	0	1.0%	405	(18)
SH_OP	375	0.5%	366	(10)	0	0.5%	366	(10)

Transmission Upgrades and Effect on SILs and Non-SIL Path Limits

FCITC	Base Case			After Transmission Upgrades		
	Summer	Winter	Shoulder	Summer	Winter	Shoulder
CPLE	2,100	4,300	3,200	4,385	5,525	3,300
DUK	2,300	3,200	2,500	4,830	5,200	2,500

SILs	Base Case*			SIL after Transmission Upgrades		
	Summer	Winter	Shoulder	Summer	Winter	Shoulder
CPLE	2,637	4,838	3,994	4,922	6,063	4,094
DUK	2,279	3,011	2,247	4,809	5,011	2,247

* SIL reflects simple average of seasonal time periods during each season; reflects scheduled interchange.

Non-SIL Path Limits	Base Case*			Path Limit after Transmission Upgrades**		
	Summer	Winter	Shoulder	Summer	Winter	Shoulder
PJM to CPLE	4,946	5,227	5,831	7,274	7,637	6,981
DUK to CPLE	3,157	3,081	3,796	3,707	5,381	5,076
PJM to DUK	1,830	1,800	1,800	2,003	2,003	2,003

* Does not reflect scheduled interchange and TRM.

** Reflects the effect of contract path limitations. This means that the incremental path limits may be less than the calculated ATC increase.

The contract path limit for PJM to DUK is 2,003 MW. The contract path limit for PJM to CPLE is 6,302 MW (summer) and 6,665 MW (winter) for the Base Case; and 7,274 MW (summer) and 7,637 MW (winter) after

ATC Creation vs. Modeled ATC Increases

Non-SIL Path Limits	Calculated Increases*			Modeled Increases		
	Summer	Winter	Shoulder	Summer	Winter	Shoulder
PJM to CPLE	2,950	2,950	1,150	2,328	2,410	1,150
DUK to CPLE	550	2,300	1,280	550	2,300	1,280
PJM to DUK	1,500	1,500	300	173	203	203

* The calculated increases ignore any limitations due to contract path limits.

** The modeled increases take into account any limitations due to contract path limits, and the starting point (Base Case) of the analysis. They also reflect scheduled interchange and TRM.

Permanent Mitigation - Transmission Upgrades
Post-Mitigation Screen Results (Available Economic Capacity)

Duke Energy Carolinas BAA

	Base Prices							
	Pre-Merger HHI	Post-Merger			Post-Transmission Upgrades			
		Market Share	HHI	HHI Chg.	Market Expansion (MW)	Market Share	HHI	HHI Chg.
S_SP1	1126	26.3%	1126	-	2,530	17.2%	630	(496)
S_SP2	2277	46.5%	2349	72	2,530	34.3%	1355	(921)
S_P	1815	41.0%	1813	(2)	2,531	25.8%	861	(954)
S_OP	3434	62.4%	3963	529	2,531	47.8%	2391	(1,043)
W_SP	405	1.4%	378	(27)	2,000	1.7%	393	(12)
W_P	1091	31.3%	1168	76	1,929	22.8%	754	(338)
W_OP	1963	46.3%	2262	299	2,001	35.6%	1418	(545)
SH_SP	1472	36.4%	1475	3	-	36.4%	1475	3
SH_P	460	0.6%	494	35	-	0.6%	496	37
SH_OP	371	0.9%	402	31	-	0.9%	403	33

	Price increase 10%							
	Pre-Merger HHI	Post-Merger			Post-Transmission Upgrades			
		Market Share	HHI	HHI Chg.	Market Expansion (MW)	Market Share	HHI	HHI Chg.
S_SP1	1131	26.7%	1137	5	2,530	17.7%	632	(499)
S_SP2	2332	48.8%	2567	235	2,531	36.6%	1520	(812)
S_P	2722	52.4%	2866	144	2,530	37.4%	1542	(1,180)
S_OP	3475	63.1%	4047	572	2,530	48.4%	2442	(1,032)
W_SP	554	17.5%	560	6	2,000	11.4%	425	(129)
W_P	1090	32.0%	1202	112	2,001	23.1%	745	(345)
W_OP	2014	47.7%	2394	380	2,000	36.9%	1515	(500)
SH_SP	1779	38.4%	1779	-	-	38.5%	1780	1
SH_P	464	3.4%	446	(17)	-	2.9%	450	(14)
SH_OP	642	21.0%	791	149	-	20.7%	783	141

	Price decrease 10%							
	Pre-Merger HHI	Post-Merger			Post-Transmission Upgrades			
		Market Share	HHI	HHI Chg.	Market Expansion (MW)	Market Share	HHI	HHI Chg.
S_SP1	786	1.6%	789	3	2,530	1.8%	491	(295)
S_SP2	1488	32.6%	1489	1	2,530	20.8%	725	(763)
S_P	1820	41.1%	1826	6	2,531	25.9%	881	(939)
S_OP	2027	47.8%	2427	400	2,530	33.1%	1288	(739)
W_SP	400	0.0%	385	(15)	1,946	0.0%	415	15
W_P	516	16.8%	555	39	1,985	11.3%	441	(75)
W_OP	1530	40.0%	1756	227	2,001	29.7%	1087	(443)
SH_SP	393	0.0%	404	11	-	0.0%	404	10
SH_P	432	0.9%	348	(85)	9	0.9%	351	(81)
SH_OP	405	0.1%	387	(18)	-	0.1%	388	(17)

Permanent Mitigation - Transmission Upgrades
Post-Mitigation Screen Results (Available Economic Capacity)

Progress Energy Carolinas East BAA

Base Prices								
	Pre-Merger HHI	Post-Merger			Post-Transmission Upgrades			
		Market Share	HHI	HHI Chg.	Market Expansion (MW)	Market Share	HHI	HHI Chg.
S_SP1	524	4.0%	476	(48)	2,285	4.2%	446	(79)
S_SP2	590	25.6%	897	307	2,286	18.2%	585	(4)
S_P	368	8.7%	392	24	2,285	8.5%	392	24
S_OP	1301	45.4%	2194	894	2,286	35.0%	1402	101
W_SP	466	2.0%	393	(73)	1,225	2.1%	389	(77)
W_P	336	13.5%	431	96	1,224	14.2%	445	110
W_OP	568	28.2%	992	424	1,225	26.3%	891	324
SH_SP	413	6.6%	430	17	100	7.2%	436	23
SH_P	447	0.8%	498	51	100	0.8%	514	67
SH_OP	381	4.2%	412	32	100	4.2%	419	39

Price increase 10%								
	Pre-Merger HHI	Post-Merger			Post-Transmission Upgrades			
		Market Share	HHI	HHI Chg.	Market Expansion (MW)	Market Share	HHI	HHI Chg.
S_SP1	465	5.4%	441	(24)	2,285	5.6%	415	(49)
S_SP2	699	31.1%	1170	471	2,285	22.8%	739	40
S_P	729	35.3%	1445	715	2,285	27.8%	972	242
S_OP	1379	45.5%	2205	826	2,285	35.1%	1402	22
W_SP	394	1.7%	409	15	1,225	1.8%	414	21
W_P	353	14.0%	452	100	1,225	13.9%	451	99
W_OP	598	27.8%	988	391	1,225	26.2%	899	302
SH_SP	443	8.9%	421	(22)	101	9.3%	424	(19)
SH_P	460	10.3%	451	(9)	100	10.1%	459	(1)
SH_OP	822	26.6%	932	110	100	26.2%	911	88

Price decrease 10%								
	Pre-Merger HHI	Post-Merger			Post-Transmission Upgrades			
		Market Share	HHI	HHI Chg.	Market Expansion (MW)	Market Share	HHI	HHI Chg.
S_SP1	567	1.5%	517	(50)	2,286	1.7%	490	(77)
S_SP2	485	4.6%	440	(45)	2,285	4.4%	423	(62)
S_P	339	8.1%	367	28	2,285	8.0%	372	33
S_OP	1198	35.4%	1423	224	2,286	24.7%	856	(342)
W_SP	524	0.0%	445	(79)	1,225	0.0%	475	(49)
W_P	474	5.1%	425	(49)	1,224	4.2%	448	(26)
W_OP	495	20.1%	655	160	1,225	19.5%	635	139
SH_SP	375	0.0%	410	36	100	0.0%	416	41
SH_P	423	1.0%	405	(18)	100	1.0%	417	(6)
SH_OP	375	0.5%	366	(10)	100	0.5%	362	(14)

Creation of Additional Competing Supply from Transmission Upgrades

Duke Energy Carolinas BAA

	Pre-Merger Rival Capacity	Base Prices		
		Post-Transmission Upgrades		
		Market Expansion (MW)	Rival Capacity	Increase in Rival Capacity
S_SP1	3,003	2,530	5,467	2,464
S_SP2	3,456	2,530	5,843	2,387
S_P	2,220	2,531	4,670	2,450
S_OP	2,779	2,531	4,758	1,979
W_SP	2,614	2,000	4,594	1,980
W_P	3,044	1,929	4,845	1,801
W_OP	3,320	2,001	5,025	1,705

	Pre-Merger Rival Capacity	Price increase 10%		
		Post-Transmission Upgrades		
		Market Expansion (MW)	Rival Capacity	Increase in Rival Capacity
S_SP1	2,988	2,530	5,433	2,445
S_SP2	3,462	2,531	5,684	2,222
S_P	2,691	2,530	5,020	2,329
S_OP	2,793	2,530	4,749	1,956
W_SP	2,671	2,000	4,635	1,964
W_P	3,096	2,001	4,954	1,858
W_OP	3,372	2,000	5,013	1,641

	Pre-Merger Rival Capacity	Price decrease 10%		
		Post-Transmission Upgrades		
		Market Expansion (MW)	Rival Capacity	Increase in Rival Capacity
S_SP1	3,011	2,530	5,485	2,474
S_SP2	2,632	2,530	5,098	2,466
S_P	2,220	2,531	4,664	2,444
S_OP	2,625	2,530	4,785	2,160
W_SP	2,662	1,946	4,617	1,955
W_P	3,156	1,985	5,065	1,909
W_OP	3,372	2,001	5,160	1,788

Progress Energy Carolinas East BAA

Base Prices

	Pre-Merger Rival Capacity	Post-Transmission Upgrades		
		Market Expansion (MW)	Rival Capacity	Increase in Rival Capacity
S_SP1	2,341	2,285	4,434	2,093
S_SP2	2,399	2,286	4,230	1,831
S_P	3,136	2,285	4,961	1,825
S_OP	3,019	2,286	4,364	1,345

Price increase 10%

	Pre-Merger Rival Capacity	Post-Transmission Upgrades		
		Market Expansion (MW)	Rival Capacity	Increase in Rival Capacity
S_SP1	2,341	2,285	4,371	2,030
S_SP2	2,400	2,285	4,072	1,672
S_P	3,321	2,285	4,664	1,343
S_OP	3,019	2,285	4,418	1,399

Price decrease 10%

	Pre-Merger Rival Capacity	Post-Transmission Upgrades		
		Market Expansion (MW)	Rival Capacity	Increase in Rival Capacity
S_SP1	2,341	2,286	4,551	2,210
S_SP2	3,250	2,285	5,324	2,074
S_P	3,136	2,285	4,987	1,851
S_OP	3,019	2,286	5,058	2,039

**Permanent Mitigation - Transmission Upgrades and Set-Aside
Post-Mitigation Screen Results (Available Economic Capacity)**

Progress Energy Carolinas East BAA

	Base Prices				Price increase 10%				Price decrease 10%			
	Pre-Merger HHI	Post-Mitigation			Pre-Merger HHI	Post-Mitigation			Pre-Merger HHI	Post-Mitigation		
		Market Share	HHI	HHI Chg.		Market Share	HHI	HHI Chg.		Market Share	HHI	HHI Chg.
S_SP1	524	4.2%	446	(79)	465	5.6%	415	(49)	567	1.7%	490	(77)
S_SP2	590	18.2%	585	(4)	699	22.8%	739	40	485	4.4%	423	(62)
S_P	368	8.5%	392	24	729	27.8%	972	242	339	8.0%	372	33
S_OP	1301	34.8%	1392	91	1379	34.9%	1393	14	1198	24.6%	854	(344)
W_SP	466	2.1%	389	(77)	394	1.8%	414	21	524	0.0%	475	(49)
W_P	336	14.2%	445	110	353	13.9%	451	99	474	4.2%	448	(26)
W_OP	568	26.3%	891	324	598	26.2%	899	302	495	19.5%	635	139
SH_SP	413	7.2%	436	23	443	9.3%	424	(19)	375	0.0%	416	41
SH_P	447	0.8%	514	67	460	10.1%	459	(1)	423	1.0%	417	(6)
SH_OP	381	4.2%	419	39	822	26.2%	911	88	375	0.5%	362	(14)

EXHIBIT C

**EXECUTED POWER SALES AGREEMENTS PROVIDED
AS INTERIM MITIGATION**

DEC-Cargill PSA

MASTER POWER PURCHASE AND SALE AGREEMENT CONFIRMATION LETTER

This is a confirmation (the "Confirmation") dated March 19, 2012, between Duke Energy Carolinas, LLC ("DEC") and Cargill Power Markets, LLC ("Buyer") (individually a "Party" and collectively the "Parties"). The Parties agree as follows:

COMMERCIAL TERMS

- General:** DEC will sell and deliver, and Buyer will purchase and receive, the Quantity of Capacity and Energy every hour during the Delivery Period.
- Product:** Capacity and Firm (LD) Energy, as defined in Schedule P of the EEI Master Agreement. DEC will not use the Capacity sold hereunder to meet its planning or operational reserve requirements. The Energy will be delivered from DEC's generating resources.
- Quantity:**
- 150 MW On-Peak (Monday to Friday 0700 EPT-2300 EPT), Summer (June 1 through August 31)
 - 300 MW Off-Peak (Monday to Sunday 2300 EPT-0700 EPT and Saturday and Sunday 0700 EPT-2300 EPT), Summer
 - 25 MW On-Peak, Winter (December 1 through February 28)
 - 225 MW Off-Peak Winter
- Term:** Begins the first day after the date of the closing of the Merger, but not earlier than June 1, 2012 and not later than August 1, 2012 and ends February 28, 2015. Within five Business Days after all regulatory approvals required for the closing of the Merger have been obtained, DEC will give notice to Buyer of the closing date of the Merger. The "Merger" means the merger between Progress Energy, Inc and Duke Energy Corporation which has been conditionally approved by the Federal Energy Regulatory Commission ("FERC") in FERC docket EC11-60.
- Delivery Periods:** Summer 2012: The period beginning at 0000 EPT on the first day after the date of the closing of the Merger, but not earlier than June 1, 2012 and not later than August 1, 2012, and ending at 2400 EPT on August 31, 2012.

Winter 2012-13: The period beginning at 0000 EPT on December 1, 2012 and ending at 2400 EPT on February 28, 2013.

Summer 2013: The period beginning at 0000 EPT on June 1, 2013 and ending at 2400 EPT on August 31, 2013.

Winter 2013-14: The period beginning at 0000 EPT on December 1, 2013 and ending at 2400 EPT on February 28, 2014.

Summer 2014: The period beginning at 0000 EPT on June 1, 2014 and ending at 2400 EPT on August 31, 2014.

Winter 2014-15: The period beginning at 0000 EPT on December 1, 2014 and ending at 2400 EPT on February 28, 2015.

Payment:

Buyer shall pay to DEC or DEC shall pay to Buyer, as applicable, the Monthly Capacity Price every month for the entire Delivery Period and shall pay to DEC the Energy Price for all Energy delivered hereunder.

Monthly Capacity Price:

June 2012	\$290,000
July 2012	\$370,000
August 2012	\$320,000
December 2012	(\$695,000)
January 2013	(\$475,000)
February 2013	(\$180,000)
June 2013	(\$810,000)
July 2013	(\$270,000)
August 2013	(\$270,000)
December 2013	(\$820,000)
January 2014	(\$620,000)
February 2014	(\$440,000)
June 2014	(\$820,000)
July 2014	(\$480,000)
August 2014	(\$380,000)
December 2014	(\$880,000)
January 2015	(\$750,000)
February 2015	(\$320,000)

For the avoidance of doubt, amounts in parentheses shall be paid by DEC to Buyer. If the first day of the Term falls on any day other than the first day of a calendar month, the Monthly Capacity Payment for that month shall be prorated on a daily basis.

Energy Price:

On-Peak Summer: the product of the On-Peak Summer Heat Rate times the Gas Index

Off-Peak Summer: the product of the Off-Peak Summer Heat Rate times the Gas Index

On-Peak Winter: the product of the On-Peak Winter Heat Rate times the Gas Index

Off-Peak Winter: the product of the Off-Peak Winter Heat Rate times the Gas Index

Gas Index:

Daily index price for natural gas in MMBtu, as reported in the Platts Daily Publication Gas Daily, under the heading Transco Zone 5

Heat Rates:

On-Peak Summer: 10.0 MMBtu/MWh

Off-Peak Summer: 7.0 MMBtu/MWh

On-Peak Winter: 8.950 MMBtu/MWh

Off-Peak Winter: 7.0 MMBtu/MWh

Delivery Point:

DUK system busbar

Transmission:

Buyer shall obtain transmission service and any Ancillary Services required for transmission of the Energy from the Delivery Point.

Energy Scheduling:

Buyer shall purchase and schedule the full Quantity of Energy during all hours of the Delivery Period unless excused under the terms of this Agreement. Prior to 0930 EPT of the day prior to the day of delivery of the Energy, Buyer will request transmission service sufficient to transmit the full Quantity of Energy from the Delivery Point to the ultimate sink. To the

extent the ultimate sink is the PJM Interconnection and Buyer has requested and been denied PJM Spot In (or equivalent no reservation fee import service), Buyer shall request non-firm point to point import transmission service. By no later than 0930 EPT of the day prior to the day of delivery of the Energy, Buyer will provide written notice (the "0930 Notice") to DEC stating the quantity of Energy of which Buyer will take delivery and the transmission path from the Delivery Point to the ultimate sink for which Buyer obtained or attempted to obtain transmission service.

If the 0930 Notice states that Buyer will not take delivery of the full Quantity, then Buyer shall state the reason. If the 0930 Notice states that Buyer will not take delivery of the full Quantity of Energy because Buyer was unable to obtain transmission service sufficient to transmit the full Quantity from the Delivery Point to the ultimate sink, then, by no later than 1530 EPT, Buyer shall provide another written notice (the "1530 Notice") to DEC stating the additional quantity of Energy (up to the full Quantity of Energy) for which Buyer has obtained transmission service on the same path as the 0930 Notice and of which Buyer will take delivery. If the 0930 Notice and 1530 Notice, if any, state that Buyer will not take delivery of the full Quantity of Energy, then DEC shall be excused from its obligation to deliver the quantity of Energy. For the avoidance of doubt, Buyer's failure to submit requests for sufficient transmission service (firm, Spot In, and/or non-firm) or to give notice to DEC in accordance with the deadlines set forth in this provision will constitute an unexcused failure to receive, otherwise Buyer's performance will be excused.

OTHER PROVISIONS

1. Conditions Precedent

(a) It is a condition precedent to the Parties' obligations hereunder that the closing of the Merger occurs by July 31, 2012.

(b) It is a condition precedent to the Parties' obligations hereunder that this Confirmation is accepted by FERC by July 31, 2012 as a DEC rate schedule under the Federal Power Act without modification, suspension, investigation or other condition (including setting this Confirmation, or part thereof, for hearing) unacceptable to DEC. DEC will give notice to the Buyer within two Business Days after this condition has been satisfied.

2. EEI Master Agreement

(a) The Parties hereby acknowledge and agree that the Master Power Purchase and Sale Agreement between the parties dated as of August 8, 2003 (the “EEI Master Agreement”) constitutes a Bridged Agreement and the Transaction under this Confirmation constitutes a Bridged Transaction as such terms are defined in Part 5 (u) of the Schedule to the ISDA Master Agreement between the Parties dated as of May 14, 2010 (collectively with the Credit Support Annex, the “ISDA Agreement”). The parties further agree that the Transaction under this Confirmation (the “Transaction”) will be governed by the EEI Master Agreement including the credit and collateral requirements set forth in Article 8 of the EEI Master Agreement and neither party will be subject to the Credit Support Obligations set forth in Paragraph 3 of the Collateral Annex to the ISDA Agreement with respect to this Transaction. Notwithstanding the foregoing, on or after the occurrence of a Bridging Event as defined in the ISDA Agreement, the 2002 ISDA Energy Agreement Bridge set forth in Part 5 (u) of the Schedule to the ISDA Agreement shall govern.

Notwithstanding the preceding paragraph, the Parties agree that the obligations of Buyer under the EEI Master Agreement are to be guaranteed by Cargill, Incorporated (“Guarantor”) and that in the event the amount of the existing guaranty issued by Guarantor to DEC and dated May 24, 2011 (the “Guaranty”) becomes insufficient to cover the sum of any Exposure amount of DEC to Buyer as defined in the ISDA Agreement (to the extent such amount is not in excess of the Threshold amount for Buyer specified therein) plus any exposure amount of DEC to Buyer under the EEI Master Agreement calculated in a similar manner, then upon the written request of DEC, Buyer will have three (3) Business Days to remedy the situation by providing an increase to the Guaranty in a form reasonably acceptable to DEC or, in the alternative, Performance Assurance in the form of cash or letter of credit, and the failure to do so will constitute an Event of Default under the EEI Master Agreement.

(b) As applied to this Confirmation only, Section 1.23 of the EEI Master Agreement is hereby amended so that it reads in its entirety as follows: “Force Majeure” means an event or circumstance which prevents one Party from performing its obligations under one or more Transactions, which event or circumstance was not anticipated as of the date the Transaction was agreed to, which is not within the reasonable control of, or the result of the negligence of, the Claiming Party, and which, by the exercise of due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided. Force Majeure shall not be based on (i) the loss of Buyer’s markets; (ii) Buyer’s inability economically to use or resell the Product purchased hereunder; (iii) the loss or failure of Seller’s supply; or (iv) Seller’s ability to sell the Product at a price greater than the Contract Price. Notwithstanding the foregoing, it shall be a Force Majeure, the performance of Buyer shall be excused, and no damages shall be payable, including any amounts determined pursuant to Article Four, if the transmission is unavailable or interrupted or curtailed for any reason, at any time, anywhere from the Delivery Point to the Buyer’s proposed ultimate sink, regardless of whether transmission, if any, that Buyer is attempting to secure and/or has purchased for the Product is firm or non-firm. If the transmission (whether firm or non-firm) that Buyer is attempting to secure is unavailable, this contingency excuses performance by the Buyer for the duration of the unavailability. If the transmission (whether firm or non-firm) that Buyer has secured from the Delivery Point to the sink is interrupted or curtailed for any reason, this contingency excuses performance by the Buyer for the duration of the interruption or curtailment. The applicability of

MASTER POWER PURCHASE AND SALE AGREEMENT

COVER SHEET

This *Master Power Purchase and Sale Agreement* ("Master Agreement") is made as of the following date: August 8, 2003 ("Effective Date"). The *Master Agreement*, together with the exhibits, schedules and any written supplements hereto, the Party A Tariff, if any, the Party B Tariff, if any, any designated collateral, credit support or margin agreement or similar arrangement between the Parties and all Transactions (including any confirmations accepted in accordance with Section 2.3 hereto) shall be referred to as the "Agreement." The Parties to this *Master Agreement* are the following:

Name ("Duke Power, a division of Duke Energy Corporation" or "Party A")

All Notices: Contract Administration

Street: 526 South Church Street, Mail Code EC3ZJ

City: Charlotte, N.C. Zip: 28202-1802

Attn: Bulk Power Contracts Manager
Phone: 704-382-4467
Facsimile: 704-373-6860
Duns: 957879984
Federal Tax ID Number: 56-0205520

Invoices:

Attn: Bulk Power Accounting and Risk Control,
Kye Antemann, Mail Code EC3ZJ
Phone: 704-382-7823
Facsimile: 704-373-6860

Scheduling:

Attn: BPM Trading Floor
Phone: 704-382-1976
Facsimile: 704-382-4014

Payments:

Attn: Cash Management, Mail Code PB03G
Phone: 704-382-7823
Facsimile: 704-373-6860

Wire Transfer:

BNK: JPMorgan Chase Bank
ABA: 021000021
ACCT: 910-2748192

Credit and Collections:

Attn: Walter Wright, Mail Code EC3ZJ
Phone: 704-382-1841
Facsimile: 704-373-6860

Name ("Cargill Power Markets, LLC" or "Party B")

All Notices: Contract Administration

Street: 12700 Whitewater Drive

City: Minnetonka, MN Zip: 55343

Attn: Contract Management
Phone: 952-984-3090
Facsimile: 952-984-3627
Duns: 01-286-1725
Federal Tax ID Number: 41-1889936

Invoices:

Attn: Michael Kaufman

Phone: 952-984-3207
Facsimile: 952-984-3627

Scheduling:

Attn: Sharon Hansen
Phone: 952-984-3852
Facsimile: 952-984-3763

Payments:

Attn: Michael Kaufman
Phone: 952-984-3207
Facsimile: 952-984-3627

Wire Transfer:

BNK: Bank One, N.A.
ABA: 071000013
ACCT: 51-01913

Credit and Collections:

Attn: Marc Rubenstein/ Christine Mullady
Phone: 952-984-3843 952-984-3664
Facsimile: 952-249-4216 952-249-4216

With additional Notices of an Event of Default or
Potential Event of Default to:

Attn: Law Department
Phone: 704-382-8136
Facsimile: 704-382-8137

With additional Notices of an Event of Default or
Potential Event of Default to:

Attn: Richard B. Davenport
Phone: 952-984-3158
Facsimile: 952-984-3627

The Parties hereby agree that the General Terms and Conditions are incorporated herein, and to the following provisions as provided for in the General Terms and Conditions:

Party A Tariff Tariff - FERC Electric Rate Schedule No. 5 Dated - September 22, 2000 Docket Number - ER00-3454-001

Party B Tariff Tariff - FERC Rate Schedule No.1 Dated - August 24, 2000 Docket Number - ER00-3186-000

Article Two

Transaction Terms and Conditions ☒ Optional provision in Section 2.4. If not checked, inapplicable.

Article Four

Remedies for Failure to Deliver or Receive ☐ Accelerated Payment of Damages. If not checked, inapplicable.

Article Five

Events of Default; Remedies

☐ Cross Default for Party A:

☒ Party A: _____ Cross Default Amount:
\$ 150,000,000
☐ Other Entity: _____ Cross Default Amount \$ _____

☐ Cross Default for Party B:

☐ Party B: _____ Cross Default Amount \$ _____
☒ Other Entity: Cargill, Inc. Cross Default Amount:
\$ 100,000,000

5.6 Closeout Setoff

☒ Option A (Applicable if no other selection is made.)

☐ Option B - Affiliates shall have the meaning set forth in the Agreement unless otherwise specified as follows: _____

☐ Option C (No Setoff)

Article 8

Credit and Collateral Requirements

8.1 Party A Credit Protection:

(a) Financial Information:

☐ Option A
☐ Option B Specify: _____
☒ Option C Specify: Cargill Power Markets, LLC will provide access to quarterly financial statements and audited

yearly reports of it's Guarantor via its website at
www.cargill.com. _____

(b) Credit Assurances:

- ☐ Not Applicable
☒ Applicable

(c) Collateral Threshold:

- ☒ Not Applicable
☐ Applicable

If applicable, complete the following:

Party B Collateral Threshold:

Party B Independent Amount: \$ 0

Party B Rounding Amount: \$ 0

(d) Downgrade Event:

- ☒ Not Applicable
☐ Applicable

If applicable, complete the following:

- ☐ It shall be a Downgrade Event for Party B if Party B's or Party B's Guarantor's Credit Rating falls below BBB- from S&P or Baa3 from Moody's or if Party B is not rated by either S&P or Moody's

- ☐ Other:
Specify: _____

(e) Guarantor for Party B: Cargill, Inc.

Guarantee Amount: \$7,000,000

8.2 Party B Credit Protection:

(a) Financial Information:

- ☒ Option A
☐ Option B Specify: _____
☐ Option C Specify: _____

(b) Credit Assurances:

- ☐ Not Applicable
☒ Applicable

(c) Collateral Threshold:

- ☒ Not Applicable
☐ Applicable

If applicable, complete the following:

Party A Collateral Threshold:

Party A Independent Amount: \$ 0

Party A Rounding Amount: \$ 0

(d) Downgrade Event:

☒ Not Applicable

☐ Applicable

If applicable, complete the following:

☐ It shall be a Downgrade Event for Party A if Party A's Credit Rating falls below BBB- from S&P or Baa3 from Moody's or if Party A is not rated by either S&P or Moody's

☐ Other:

Specify: _____

(e) Guarantor for Party A: N/A

Guarantee Amount: \$ 0

Article 10

Confidentiality

☒ Confidentiality Applicable

If not checked, inapplicable.

Schedule M

☐ Party A is a Governmental Entity or Public Power System

☐ Party B is a Governmental Entity or Public Power System

☐ Add Section 3.6. If not checked, inapplicable

☐ Add Section 8.6. If not checked, inapplicable

Other Changes

Specify, if any: _____

Additional Provision(s):

1). The Parties agree to operate in accordance with the operating and reliability standards, criteria, and guidelines of the North American Electric Reliability Council ("NERC") and the NERC regional reliability councils, or their successors.

Section 1.50: Delete the words "Section 2.4" and replace with "Section 2.5."

Section 2.4: Amend to delete "either orally or" in line 7.

Section 5.1 (g): Delete the words "or becoming capable at such time of being declared," after the words "becoming" and before the word "immediately" in the eight and ninth lines.

Section 5.1: Add a new Section 5.1(i) that reads "The default by a Party under any other agreement between the Parties including but not limited to any commodity or financial derivative agreement or transaction."

Section 5.3: Add the phrase "plus, at the option of the Non-Defaulting Party, any cash or other form of liquid security then in the possession of the Defaulting Party or its agent pursuant to Article Eight," after the first use of the phrase "due to the Non-Defaulting Party" in the sixth line.

Section 5.4: Add the following to the end of Section 5.4: "Notwithstanding any provision to the contrary contained in this Agreement, the Non-Defaulting Party shall not be required to pay to the Defaulting Party any amount under Article 5 until the Non-Defaulting Party receives confirmation satisfactory to it in its reasonable discretion (which may include an opinion of its counsel) that all other obligations of any kind whatsoever of the Defaulting Party to make any payments to the Non-Defaulting Party under this Agreement or otherwise which are due and payable as of the Early Termination Date have been fully and finally performed. Any such right by the Non-Defaulting Party to withhold payments pursuant to this provision shall expire 90 days after the effective date of the termination. The Non-Defaulting Party shall promptly provide the Defaulting Party with a written explanation of its determination."

Section 5.7: Add "and Return of Performance Assurance" after the word "Performance" in the title and at the end of the paragraph add "Upon the occurrence of an event described in '(a)' or '(b)' above the Defaulting Party shall immediately return all Performance Assurances provided by the Non-Defaulting Party pursuant to this Agreement."

Section 6.1: Add the following to end of this section, "Duke Power shall render invoices only by means of telephone facsimile (fax)"

Section 6.4: Amend to add the words "including the Power Purchase Agreement dated 2/7/1999 and Sale Agreement dated 2/9/1999 between Party A and Party B" after the word "Agreement" in the 5th line.

Sections 8.1 & 8.2 (b): Add the following to the end of the section; "If at any time, a Party's Credit Rating is below investment grade, BBB- rating by S&P or Baa3 for Moody's, and the Party (Secured Party) is holding any Performance Assurance from the other Party, then the Secured Party must transfer, or cause a transfer, of the Performance Assurance to a Qualified Institution. "Qualified Institution" means a commercial bank or trust company organized under the laws of the United States or a political subdivision thereof, with (i) a Credit Rating of at least (a) "A-" by S&P and "A3" by Moody's, if such entity is rated by both S&P and Moody's or (b) "A-" by S&P or "A3" by Moody's, if such entity is rated by either S&P or Moody's but not both, and (ii) having a capital and surplus of at least \$1,000,000,000.

Section 8.1(d): After the comma in line five, add "or fails to maintain such Performance Assurance or guaranty or other credit assurance for so long as the Downgrade Event is continuing."

Section 8.2(d): After the comma in line five, add "or fails to maintain such Performance Assurance or guaranty or other credit assurance for so long as the Downgrade Event is continuing."

Section 8.4: Add new section:

8.4 Distribution of Interest on and Use of Cash Collateral.

All Performance Assurance in the form of cash ("Cash Collateral") that is held by a Secured Party pursuant to this Article 8 shall bear interest calculated on a daily basis at the Interest Rate. Such interest shall be calculated commencing on the date Cash Collateral is received by a Secured Party and ending the day before the earlier of: (i) the date Cash Collateral is returned to a Pledgor; or (ii) the date Cash Collateral including accrued interest is applied to a Pledgor's obligations pursuant to Section 8.3. Interest accrued on Cash Collateral held during each month shall be paid by the third Business Day of the following month to the Pledgor. The "Interest Rate" for any day means the interest rate per annum equal to the rate published as the Federal Funds Effective Rate in effect for such day, as published in the most recent weekly statistical release designated as H.15-519, or any successor publication published by the Board of Governors of the Federal Reserve System as found in Bloomberg using the key "FEDL." The Secured Party shall have the free and unrestricted right to use and dispose of all Cash Collateral which it holds, subject to its obligation to return such collateral if and when so required under this Agreement.

Section 10.5: Delete the words "which consent may be withheld in the exercise of its sole discretion" and replace with the words "which consent shall not be unreasonably withheld or delayed."

Section 10.11: Amend to add the phrase "or the completed Cover Sheet to this Master Agreement" immediately before the phrase "to a third party" and to add the phrase "or the Party's Affiliates other than Affiliates engaged in purchasing and selling electricity at wholesale".

Section 10.12: Add new section:

10.12 Other Agreement Changes.

The terms and conditions and the rates for service specified in this Agreement shall remain in effect for the term of each Transaction hereunder. Absent the Parties' written agreement, this Agreement shall not be subject to change by application of either party pursuant to the provisions of Section 205 or 206 of the Federal Power Act.

Absent the agreement of all Parties to a proposed change, the standard of review for changes to this Agreement proposed by a Party, a non-party or the Federal Energy Regulatory Commission acting sua sponte shall be the "public interest" standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956) (the "Mobile-Sierra" doctrine).

Section 10.13: Add new section:

10.13 Arbitration and Legal Recourse.

10.13.1. Any unresolved controversy or claim arising out of or relating to this Agreement involving amounts less than \$5,000,000 shall be settled by arbitration in accordance with the Rules of the American Arbitration Association to the extent not inconsistent with the rules specified herein. As to disputes that involve amounts of \$5,000,000 or more, the Parties may choose to litigate or may resolve such disputes by the provisions of this Article.

10.13.2. Each Party shall choose one arbitrator within twenty (20) Business Days of either Party's written election to the other to arbitrate, and within ten (10) Business Days after both such arbitrators are chosen, such arbitrators shall choose a third arbitrator who shall act as Chair. Any arbitrator chosen shall be qualified by education, experience or training to render a decision upon the issues in dispute and who has not previously been employed by either Party, and does not have a direct or indirect interest in either Party or the subject matter of the arbitration.

10.13.3. Any arbitration hereunder shall be conducted in either a mutually agreeable location or alternating locations of each Party's choosing starting with the selected location of Party that first raised the issue.

10.13.4. The arbitrators, once chosen, shall consider any Transaction tapes or any other evidence which the arbitrators deem necessary and shall then accept sealed written resolutions of the subject dispute from each Party on a confidential basis to be submitted within twenty (20) Business Days of establishment of the arbitration panel. The written submissions shall be in a form and subject to any limitations as may be prescribed by the arbitrators. The arbitrators shall then choose only one of the proposed solutions, (without modification) as the fairest solution to the dispute within ten (10) Business Days of receipt of the written submissions of both Parties. A majority vote shall govern and the decision of the arbitrators shall be final and binding.

10.13.5. Any expenses incurred in connection with hiring the arbitrators and shall be shared and paid equally between the Parties. Each Party shall bear and pay its own expenses incurred by each in connection with the arbitration, unless otherwise included in a solution chosen by the arbitration panel. In the event either Party must file a court action to enforce an arbitration award under this Article, the prevailing Party shall be entitled to recover its court costs and reasonable attorney fees.

10.13.6. The existence, contents or results of any arbitration hereunder may not be disclosed without the prior written consent of both Parties.

Section 10.14: Add New Section:

10:14 Imaged Agreement

Any original executed Agreement, Confirmation or other related document may be photocopied and stored on computer tapes and disks (the "Imaged Agreement"). The Imaged Agreement, if introduced as evidence on paper, the Confirmation, if introduced as evidence in automated facsimile form, the Recording, if introduced as evidence in its original form and as transcribed onto paper, and all computer records of the foregoing, if introduced as evidence in printed format, in any judicial, arbitration, mediation or administrative proceedings, will be admissible as between the Parties to the same extent and under the same conditions as other business records originated and maintained in documentary form. Neither Party shall object to the admissibility of the Recording, the Confirmation or the Imaged Agreement (or photocopies of the transcription of the Recording, the Confirmation or the Imaged Agreement) on the basis that such were not originated or maintained in documentary form under either the hearsay rule, the best evidence rule or other rule of evidence.

Add the following wording to Schedule P:

The term "Native Load" shall also include those customers, located in the Duke Power control area, of entities to which Duke Power is then providing power pursuant to Duke Power's Rate Schedule 10-A and/or its successors.

Index Transactions:

Market Disruption. If a Market Disruption Event occurs during a Determination Period, the Floating Price for the affected Trading Day(s) shall be determined by reference to the Floating Price specified in the Transaction for the first Trading Day thereafter on which no Market Disruption Event exists; provided, however, if the Floating Price is not so determined within three (3) Business Days after the first Trading Day on which the Market Disruption Event occurred or existed, then the Parties shall negotiate in good faith to agree on a Floating Price (or a method for determining a Floating Price), and if the Parties have not so agreed on or before the twelfth Business Day following the first Trading Day on which the Market Disruption Event occurred or existed, then the Floating Price shall be determined in good faith by taking the average of two dealer quotes obtained from dealers of the highest credit standing which satisfy all the criteria that the Seller applies generally at the time in deciding to offer or to make an extension of credit.

"Determination Period" means each calendar month a part or all of which is within the Delivery Period of a Transaction.

"Exchange" means, in respect of a Transaction, the exchange or principal trading market specified in the relevant Transaction.

"Floating Price" means a Contract Price specified in a Transaction that is based upon a Price Source.

"Market Disruption Event" means, with respect to any Price Source, any of the following events: (a) the failure of the Price Source to announce or publish the specified Floating Price or information necessary for determining the Floating Price; (b) the failure of trading to commence or the permanent discontinuation or material suspension of trading in the relevant options contract or commodity on the Exchange or in the market specified for determining a Floating Price; (c) the temporary or permanent discontinuance or unavailability of the Price Source; (d) the temporary or permanent closing of any Exchange specified for determining a Floating Price; or (e) a material change in the formula for or the method of determining the Floating Price.

"Price Source" means, in respect of a Transaction, the publication (or such other origin of reference, including an Exchange) containing (or reporting) the specified price (or prices from which the specified price is calculated) specified in the relevant Transaction.

"Trading Day" means a day in respect of which the relevant Price Source published the Floating Price.

Corrections to Published Prices. For purposes of determining a Floating Price for any day, if the price published or announced on a given day and used or to be used to determine a relevant price is subsequently corrected and the correction is published or announced by the person responsible for that publication or announcement within two (2) years of the original publication or announcement, either Party may notify the other Party of (i) that correction and (ii) the amount (if any) that is payable as a result of that correction. If, not later than thirty (30) days after publication or announcement of that correction, a Party gives notice that an amount is so payable, the Party that originally either received or retained such amount will, not later than three (3) Business Days after the effectiveness of that notice, pay, subject to any applicable conditions precedent, to the other Party that amount, together with interest at the Interest Rate for the period from and including the day on which payment originally was (or was not) made to but excluding the day of payment of the refund or payment resulting from that correction.

Calculation of Floating Price. For the purposes of the calculation of a Floating Price, all numbers shall be rounded to three (3) decimal places. If the fourth (4th) decimal number is five (5) or greater, then the third (3rd) decimal number shall be increased by one (1), and if the fourth (4th) decimal number is less than five (5), then the third (3rd) decimal number shall remain unchanged.

IN WITNESS WHEREOF, the Parties have caused this Master Agreement to be duly executed as of the date first above written.

Duke Power, a division of Duke Energy corporation

By: Mark A. Svrcek

Name: Mark A. Svrcek

Title: Managing Director, Wholesale Business

Cargill Power Markets, LLC

By: Richard B. Davenport

Name: Richard B. Davenport

Title: Vice President

DISCLAIMER: This Master Power Purchase and Sale Agreement was prepared by a committee of representatives of Edison Electric Institute ("EEI") and National Energy Marketers Association ("NEM") member companies to facilitate orderly trading in and development of wholesale power markets. Neither EEI nor NEM nor any member company nor any of their agents, representatives or attorneys shall be responsible for its use, or any damages resulting therefrom. By providing this Agreement EEI and NEM do not offer legal advice and all users are urged to consult their own legal counsel to ensure that their commercial objectives will be achieved and their legal interests are adequately protected.

(Multicurrency--Cross Border)



International Swap Dealers Association, Inc.

**SCHEDULE
to the
1992 Master Agreement**

dated as of May 14, 2010

between

DUKE ENERGY CAROLINAS, LLC, a limited liability company organized under the laws of the State of North Carolina ("**Party A**")

and

CARGILL POWER MARKETS, LLC, a limited liability company organized under the laws of the State of Wisconsin ("**Party B**")

Part 1. Default and Termination Provisions.

(a) **"Specified Entity"** means in relation to Party A and Party B for the purpose of:

Section 5(a)(v) (Default under Specified Transaction), Not applicable;
Section 5(a)(vi) (Cross Default), Not applicable;
Section 5(a)(vii) (Bankruptcy), Not applicable; and
Section 5(b)(iv) (Credit Event Upon Merger), Not applicable.

(b) **"Specified Transaction"**, referred to in Section 5(a) and other sections, will have the meaning specified in Section 14 of this Agreement, except that such term is amended by adding on the eighth line after "currency option" the words ", agreement for the purchase, sale or transfer of any Commodity or any other Commodity trading transaction, including any Power Transaction as defined in Part 1 (i) of the Schedule." For this purpose, the term "Commodity" means any tangible or intangible commodity of any type or description (including, without limitation, electric power, electric power capacity, petroleum, natural gas, and byproducts thereof).

(c) **Cross Default.** The provisions of Section 5(a)(vi) will apply to both Party A and Party B.

If such provisions apply:--

EXECUTION

"Specified Indebtedness", will have the meaning specified in Section 14 of this Agreement.

"Threshold Amount", referred to in Section 5(a)(vi), means and shall be the amount set forth opposite the respective clauses in the following table:

	Party A	Party B's Credit Support Provider
Clause (1) of Section 5(a)(vi)	\$ 150 million	\$ 150 million
Clause (2) of Section 5(a)(vi)	\$150 million	\$ 150 million

The amounts above are in US dollars or the equivalent in another currency, currency unit or combination thereof.

(d) The **"Credit Event Upon Merger"** provisions of Section 5(b)(iv) will apply to Party A and will apply to Party B and its Credit Support Provider; provided however, that the phrase "materially weaker" means (i) the unsecured, senior, long-term indebtedness of the resulting, surviving or transferee entity is rated less than BBB- by Standard & Poor's Rating Group ("S&P's") or less than Baa3 by Moody's Investor Service, Inc. ("Moody's"), or (ii) if no such ratings exist, the Policies (as defined below) in effect at the time, of the non-Affected Party, would cause such non-Affected Party, solely as a result of a change in the nature, character, identity or condition of the Affected Party from its state (as a party to the Agreement) prior to such consolidation, amalgamation, merger or transfer, to decline to make an extension of credit to, or enter into a Transaction with, the resulting, surviving or transferee entity. For purposes of this definition, "Policies" means a party's (1) internal credit limits applicable to individual entities, (2) other limits on conducting business with entities domiciled in certain jurisdictions or engaging in certain activities, or (3) internal restrictions on conducting business with entities with whom such party has had prior adverse business relations.

In addition, Section 5(b)(iv) shall be amended to add the phrase "or effectuates a liquidating dividend, leveraged buyout, other similarly highly-leveraged transaction, redemption of indebtedness, or stock buyback or similar call on equity" immediately after the phrase "consolidates or amalgamates with, or merges with or into, or transfers all or substantially all its assets to, another entity". The parties also agree that in the event of a transfer of assets, this provision shall apply if the transfer is with respect to a substantial portion of such assets.

(e) The **"Automatic Early Termination"** provision of Section 6(a) will not apply to Party A and will not apply to Party B. Additionally, Section 6(a) is hereby amended by inserting the following at the end of the first sentence after the word "Transactions" on line 5:

"under this Master Agreement and the EEI Agreement, provided that a party may not terminate the Transactions under this Master Agreement or the EEI Agreement without terminating the Transactions under the other agreement." "EEI Agreement" shall mean the EEI Master Power Purchase & Sale Agreement dated August 8, 2003 between Party A and Party B, as amended.

(f) The "**Additional Termination Event**" provision of Section 5(b)(v) will not apply with respect to either party.

(g) "**Additional Event of Default**" shall apply with respect to both Party A and Party B and is defined as the following:

"Adequate Assurance Default." When a party ("Demanding Party") has commercially reasonable grounds for insecurity regarding payment or performance by the other party ("Affected Party") (i) under this Agreement and/or (ii) with respect to any transaction for the purchase and sale of physical electric power, electric power capacity ("Power Transaction"), pursuant to the EEI Agreement, then the other party ("Demanding Party") may require the Affected Party to provide Adequate Assurance. Failure by the Affected Party to transfer Adequate Assurance to the Demanding Party pursuant to Part 1(i)(1) of this Agreement shall be an Event of Default under Section 5 of this Agreement.

(1) The Affected Party shall transfer such Adequate Assurance by 5:00 p.m. on the second (2nd) Local Business Day following the date of receipt by the Affected Party of the demand by the Demanding Party. If the demand for Adequate Assurance is received by the Affected Party after 2:00 p.m. on a Local Business Day, receipt of such demand shall be deemed to have occurred on the next following Local Business Day.

(a) "**Adequate Assurance**" means Cash or a Letter of Credit, for an amount and term reasonably acceptable to the Demanding Party.

(b) Adequate Assurance shall be deemed to be Posted Collateral and be subject to the provisions contained in the Credit Support Annex; however, such Adequate Assurance shall not be included in the calculation of Delivery Amount or Return Amount as defined in Paragraph 3.

(2) Once the Demanding Party has determined in a commercially reasonable manner that (i) the Affected Party no longer presents an insecurity regarding payment or performance, or (ii) the Affected Party has no further obligations under this Agreement, then the Demanding Party shall (at the request of the Affected Party if the Adequate Assurance was posted pursuant to (ii) herein) return such Adequate Assurance by 5:00 p.m. on the second (2nd) Local Business Day following such determination or request, as applicable.

(h) **Payments on Early Termination.** For the purpose of Section 6(e) of this Agreement:

(i) Loss will apply.

- (ii) The Second Method will apply.
- (i) **"Termination Currency"** means United States Dollars.
- (j) **Amendments to Section 5(a).** The parties agree to amend the following subsections of Section 5(a) as follows:
 - (i) Clause (i) is amended to delete the phrase "on or before the third Local Business Day" in the third line thereof and insert the phrase "within two Local Business Days".
 - (ii) Clause (v) is amended to delete the phrase "continues for at least three Local Business Days" in the seventh line thereof and insert the phrase "continues for at least two Local Business Days".

Part 2. Tax Representations.

- (a) **Payer Representations.** For the purpose of Section 3(e) of this Agreement, Party A and Party B each make the following representation:

It is not required by any applicable law, as modified by the practice of any relevant governmental revenue authority, of any Relevant Jurisdiction to make any deduction or withholding for or on account of any Tax from any payment (other than interest under Section 2(e), 6(d)(ii) or 6(e) of this Agreement) to be made by it to the other party under this Agreement. In making this representation, it may rely on (i) the accuracy of any representations made by the other party pursuant to Section 3(f) of this Agreement, (ii) the satisfaction of the agreement contained in Section 4(a)(i) or 4(a)(iii) of this Agreement and the accuracy and effectiveness of any document provided by the other party pursuant to Section 4(a)(i) or 4(a)(iii) of this Agreement and (iii) the satisfaction of the agreement of the other party contained in Section 4(d) of this Agreement, provided that it shall not be a breach of this representation where reliance is placed on clause (ii) and the other party does not deliver a form or document under Section 4(a)(iii) by reason of material prejudice to its legal or commercial position.

- (b) **Payee Representations.** For the purpose of Section 3(f) of this Agreement, each party makes the representations specified below, if any. The following representations apply with respect to each Transaction between Party A and Party B:

Party A: Party A is a limited liability company organized under the laws of the State of North Carolina and is a resident of the United States of America and its U.S. taxpayer identification number is 56-0205520.

Party B: Party B is a limited liability company organized under the laws of the State of Wisconsin and is a resident of the United States of America and its U.S. taxpayer identification number is 41-1889936.

Part 3. Agreement to Deliver Documents.

For the purpose of Sections 4(a)(i) and (ii) of this Agreement, each party agrees to deliver the following documents, as applicable:

Documents to be delivered are:

Party required to deliver document	Form/Document/Certificate	Date by which to be delivered	Covered by Section 3(d) Representation
Party A and Party B	Signing authority consisting of evidence of authority, incumbency and specimen signature of each person executing any document on its behalf in connection with this Agreement.	On the signing of this Agreement and, if requested, upon signing of any Confirmation.	Yes
Party A and Party B	The most recent copy of the Annual Report and audited, and publicly available, consolidated financial statements for such party or, if none, the party's Credit Support Provider, certified by independent public accountants and prepared in accordance with generally accepted accounting principles.	As soon as practicable after demand but in no event earlier than 120 days after the end of each fiscal year of a Party's Credit Support Provider if such financial statement is not available on "EDGAR" or its home page on the World Wide Web at http://www.duke-energy.com/ , with respect to Party A and http://www.cargill.com/ with respect to Party B.	Yes
Party A and Party B	Most recently prepared unaudited quarterly financial statements of a party's Credit Support Provider prepared in accordance with GAAP.	As soon as practicable after demand. If such financial statement is not available on "EDGAR" or the	Yes

party's home page on the World Wide Web at <http://www.duke-energy.com/>, with respect to Party A and <http://www.cargill.com/> with respect to Party B.

Party A and Party B	A duly executed copy of the Credit Support Documents.	At execution of this Master Agreement.	Yes
Party A and Party B	A properly executed Internal Revenue Service Form W-9 or an appropriate successor form.	Upon execution of this Agreement and thereafter to the extent the form previously furnished has ceased to be effective, the information therein has become inaccurate or such form has been superseded.	Yes
Party A and Party B	Such other documents as the other party may reasonably request.	Upon request.	No

Part 4. Miscellaneous.

(a) **Addresses for Notices.** For the purpose of Section 12(a) of this Agreement:

Address for notices or communications to **Party A:**

All notices or communications to Party A relating to this Agreement, other than those given connection with Sections 5, 6 or 9(b), or Paragraph 13 of the Credit Support Annex, are to be given to it at the following address or to be sent by facsimile transmission to the number set out below:

Address: Duke Energy Carolinas, LLC
Regular Mail: 139 East Fourth Street, EA 503
Overnight Mail: 221 East Main Street, AT II, 6th Floor
Cincinnati, Ohio 45202
Attention: Manager, Contract Administration
Telephone No.: 513-419-5466
Facsimile No: 513-419-5196

Any notices or communications to be sent to Party A in connection with Sections 5, 6 or 9(b), or Paragraph 13 of the Credit Support Annex, are also to be given to it at the following address or to be sent by facsimile transmission to the number set out below:

Address: Duke Energy Carolinas, LLC
Regular Mail: 526 South Church Street, EC204Z
Charlotte, NC 28202
Attention: Credit Risk Manager
Telephone No.: 704-382-5903
Facsimile No.: 704-382-1241

Any notices or communications to be sent to Party A in connection with Sections 5 or 6 are also to be given to it at the following address or to be sent by facsimile transmission to the number set out below:

Address: Duke Energy Carolinas, LLC
139 E. Fourth Street EA025
Cincinnati, OH 45202
Attention: Associate General Counsel
Telephone No.: 513-419-1824
Facsimile No.: 513-419-1846

Address for Party A Transfers:

Payment: PNC Bank
For the Account of: DEC
Account No/CHIPS UID: 4006907111
Fed. ABA No.: 042000398

Address for notices or communications to **Party B**:

Cargill Power Markets, LLC
Mailstop #150
9350 Excelsior Blvd.
Hopkins, MN 55343
USA
Attention: Credit Department
Telephone: 952-984-3660

EXECUTION

(b) **Process Agent.** For the purpose of Section 13(c) of this Agreement, neither Party A nor Party B appoints a process agent.

(c) **Offices.** The provisions of Section 10(a) will apply to this Agreement.

(d) **Multibranch Party.** For the purpose of Section 10(c) of this Agreement:

Party A is not a Multibranch Party.

Party B is not a Multibranch Party.

(e) **Calculation Agent.** The Calculation Agent is Party A unless otherwise specified in a Confirmation in relation to the relevant Transaction; provided, however, if Party A is the Defaulting Party, the Calculation Agent shall be Party B (or any designated third party mutually agreed to by the parties) until such time as Party A is no longer a Defaulting Party. All calculations made by the Calculation Agent may be independently confirmed by the other party at its sole discretion. In the event that the Parties' initial calculations are inconsistent and the amount owed disputed, the undisputed amount will be used to determine payment obligations and, if then due, paid by the relevant party. The parties shall endeavor to resolve any such dispute in good faith. If the parties are unable to resolve such dispute within a commercially reasonable time, the parties shall mutually select a dealer in the applicable commodity to act as Calculation Agent with respect to the issue in dispute. The failure of Party A to perform its obligations as Calculation Agent hereunder shall not be construed as an Event of Default or Termination Event.

(f) **Credit Support Document.** (i) With respect to Party A and Party B, the Credit Support Annex and any schedule attached hereto, which constitutes a Credit Support Document, is incorporated by reference in, and made part of, the Agreement and each Confirmation (unless provided otherwise in a Confirmation) as if set forth in full in the Agreement or such Confirmation. (ii) With respect to Party A, none. (iii) With respect to Party B, a guaranty, in the form and substance acceptable to Party A.

(g) **Credit Support Providers.** With reference to Section 14 (Definitions), "Credit Support Provider" means None in relation to Party A. "Credit Support Provider" means Cargill, Incorporated in relation to Party B.

(h) **Governing Law.** In regard to Section 13(a), the Parties agree that this Agreement will be governed by and construed in accordance with New York law (without reference to choice of law doctrine).

(i) **Netting of Payments.** Sub-paragraph (ii) of Section 2(c) of this Agreement will not apply and therefore the netting specified in Section 2(c) of this Agreement will apply across all Transactions with effect from the effective date of this Agreement. For avoidance of doubt, the parties hereby acknowledge and agree that the provisions of Section 2(c) shall not apply to any transaction or agreement not covered by this Agreement. The Calculation Agent shall notify the parties of the

amounts of such netted payments (which notice may be made by telephone). Notwithstanding the foregoing and the netting of payments pursuant hereto, each party will provide the other party with separate invoices and documentation covering each Transaction sufficient to permit the other party to comply with its internal accounting and record keeping procedures concerning individual Transactions.

- (j) **Affiliate.** "Affiliate" will have the meaning specified in Section 14 of this Agreement.

Part 5. Other Provisions

- (a) **Additional Definitions.** Section 1 (a) ("**Definitions**") is expanded to provide that this Agreement, each Confirmation and each Transaction incorporates, and is subject to and governed by, the 2000 ISDA Definitions (the "ISDA Definitions") and the 2005 ISDA Commodity Definitions (the "Commodity Definitions"), each as amended, supplemented, updated, and restated from time to time, each as published by the International Swaps and Derivatives Association, Inc. (formerly known as the International Swap Dealers Association, Inc.) (collectively, the "Definitions"). For purposes of this Agreement, all references in the Definitions to "Swap Transactions" shall be deemed references to "Transactions". Furthermore, with respect to the Market Disruption Events and Disruption Fallbacks set forth in the Commodity Definitions, the parties agree that Sections 7.4(d)(i) and 7.5(d)(i) shall apply to all Transactions; provided, however, that the term "Fallback Reference Dealer" shall be amended to provide that each party shall select two Reference Dealers which shall not be affiliates of either party. The Definitions, as so modified, are incorporated by reference herein, and made part of, this Agreement and each Confirmation as if set forth in full in this Agreement and such Confirmations.
- (b) **Inconsistency.** Section 1 (b) ("**Inconsistency**") is modified to provide that in the event of any inconsistency between the provisions of this Agreement (including this Schedule) and the Definitions referred to above, this Agreement will prevail. In the event of any inconsistency between the provisions of any Confirmation and this Agreement (including this Schedule) or the Definitions, such Confirmation will prevail for the purpose of the relevant Transaction. In the event of any inconsistency between the provisions of the ISDA Definitions and the Commodity Definitions, the Commodity Definitions, as amended, shall control.
- (c) **Termination Based on Notice.** This Agreement may be terminated by a party giving thirty (30) days' prior written notice to the other, *provided however*, that this Agreement shall remain in full force and effect with respect to any Transactions governed by this Agreement and any obligations arising under or in connection with such Transactions and provided, further, that if, after any such termination, any performance of any such obligation is rescinded or must otherwise be restored or returned upon the insolvency, bankruptcy or reorganization of a party or otherwise, then this Agreement shall apply to such obligation as if such obligation had not been performed. Such notice will only be effective if there is concurrent cancellation of the EEI Agreement.
- (d) **Single Agreement.** The phrase "(evidencing Transactions heretofore or hereafter entered into between Party A and Party B)" is hereby added after the word "Confirmations" in Section 1(c).
- (e) **Additional Representations.** Section 3 is amended by adding the following paragraphs 3 (g), (h), (i), (j) and (k):

“(g) **Line of Business.** It has entered into this Agreement (including each Transaction evidenced hereby) in conjunction with its line of business (including financial intermediation services) or the financing of its business.

(h) **Eligible Contract Participant.** It is an "eligible contract participant" as such term is defined in Section 1a(12) of the Commodity Exchange Act, as amended.

(i) **Standardization, Creditworthiness, and Transferability.** The economic terms of this Agreement, any Credit Support Document and each Transaction have been individually tailored and negotiated by each party. Each party has received and reviewed financial information concerning the other party and has had a reasonable opportunity to ask questions of and receive answers and information from the other party concerning such other party, this Agreement, such Credit Support Document, and such Transaction. The creditworthiness of the other party was a material consideration to each party in entering into or determining the terms of this Agreement, such Credit Support Document and such Transaction. The transferability of this Agreement, such Credit Support Document, and such Transaction is restricted as provided herein and therein.

(j) **No Reliance.** In connection with the negotiation of, the entering into, and the confirming of the execution of this Agreement, any Credit Support Document to which it is a party, and each Transaction: (i) it is acting as principal (and not as agent or in any other capacity, fiduciary or otherwise); (ii) the other party is not acting as a fiduciary or financial or investment advisor for it; (iii) it is not relying upon any representations (whether written or oral) of the other party other than the representations expressly set forth in this Agreement and in such Credit Support Document; (iv) the other party has not given to it (directly or indirectly through any other person) any advice, counsel, assurance, guarantee, or representation whatsoever as to the expected or projected success, profitability, return, performance, result, effect, consequence, or benefit (either legal, regulatory, tax, financial, accounting, or otherwise) of this Agreement, such Credit Support Document, or such Transaction; (v) it has consulted with its own legal, regulatory, tax, business, investment, financial, and accounting advisors to the extent it has deemed necessary, and it has made its own investment, hedging, and trading decisions based upon its own judgment and upon any advice from such advisors as it has deemed necessary, and not upon any view expressed by the other party; (vi) all trading decisions have been the result of arm's length negotiations between the parties; and (vii) it is entering into this Agreement, such Credit Support Document, and such Transaction with a full understanding of all of the risks hereof and thereof (economic and otherwise) and it is capable of assuming and willing to assume (financially and otherwise) those risks.

(k) **Commercial User.** Solely with respect to Options, it is a producer, processor, or commercial user of, or a merchant handling, the commodity which is the subject of the Transaction, or the products or byproducts thereof, and it is entering into such Transaction solely for purposes related to its business as such.

(l) **Bankruptcy Code Representation.** The parties hereto intend that this Agreement shall be a "swap agreement" and a "master agreement" for purposes of 11 U.S.C 101(53B)."

(f) **Absence of Litigation.** Section 3(c) of this Agreement is hereby amended by adding the words "in any material respect" to the end of the section.

(g) **Accuracy of Specified Information.** Section 3(d) of this Agreement is hereby amended by adding in the third line thereof after the word "respect" and before the period the words "or, in the case of audited or unaudited financial statements, a presentation of the financial condition of the relevant party in accordance with generally accepted accounting principles, consistently applied."

(h) **Bankruptcy.** Section 5(a)(vii)(4) is hereby modified by deleting, following the word "liquidation" in line 9, the clause beginning with "and, in the case of" and ending with the word "thereof" in line 13; and in clause (vii)(7): deleting, following the word "assets" in line 19, the clause beginning with "and such secured party" and ending with the word "thereafter" in line 21.

(i) **Early Termination Period.** Notwithstanding anything to the contrary in Section 6(a), (b), or (c) the parties agree that, except with respect to Transactions (if any) that are subject to Automatic Early Termination, the Non-defaulting Party is not required to liquidate the Transactions on a single day, but rather may liquidate the Transactions over a commercially reasonable period of time (not to exceed twenty (20) days) (the "Early Termination Period"). The last day of the Early Termination Period shall be the Early Termination Date for purposes of Section 6; provided, however, that interest shall accrue on the Transactions liquidated during the Early Termination Period (i.e. from the date of liquidation) prior to the Early Termination Date at the Default Rate.

(j) **Setoff.** Section 6 is amended by adding a new Section 6(f) as follows:

"(f) **Set-off.** Without affecting the provisions of the Agreement requiring the calculation of certain net payment amounts, all payments under this Agreement will be made without set-off or counterclaim; provided, however, that upon the designation of any Early Termination Date, in addition to and not in limitation of any other right or remedy (including right to set off, counterclaim, or otherwise withhold payment or any recourse to any Credit Support Document) under applicable law the Non-defaulting Party or Non-affected Party (in either case, "X") may without prior notice to any person set off any sum or obligation (whether or not arising under this Agreement and whether matured or unmatured, whether or not contingent or irrespective of currency, place of payment or booking office of the sum or obligation) owed by or owed to the Defaulting Party or Affected Party (in either case, "Y") to or from X or any Affiliate of X against any sum or obligation (whether or not arising under this Agreement and whether matured or unmatured, whether or not contingent or irrespective of currency, place of payment or booking office of the sum or obligation) owed by or owed to X or any Affiliate of X to or from Y.

For this purpose, either the Early Termination Amount or the Other Agreement Amount (or the relevant portion of such amounts) may be converted by X into the currency in which the other

is denominated at the rate of exchange at which such party is able, acting in a reasonable manner and in good faith, to purchase the relevant amount of such currency.

If an obligation is unascertained, X may in good faith estimate that obligation and set-off in respect of the estimate, subject to the relevant party accounting to the other when the obligation is ascertained.

Nothing in this Section 6(f) shall be effective to create a charge or other security interest. This Section 6(f) shall be without prejudice and in addition to any right of set-off, combination of accounts, lien or other right to which any party is at any time otherwise entitled (whether by operation of law, contract or otherwise)."

- (k) ***Procedures for Entering Into Transactions.*** Section 9(e) "Counterparts and Confirmations" is hereby deleted in its entirety and replaced with the following:

"(e) ***Counterparts and Confirmations.***

- (i) This Agreement (and each amendment, modification and waiver in respect of it) may be executed and delivered in counterparts (including by facsimile transmission), each of which will be deemed an original.
- (ii) Should the parties come to an understanding regarding a particular Transaction, a legally binding agreement shall exist from the moment that the parties hereto agree on the essential terms of such Transaction, whether it is orally or electronically recorded (the "Transaction Tape").
- (iii) Party B shall promptly send to Party A a Confirmation setting forth the terms of such Transaction. Party A shall execute and return the Confirmation to Party B or request correction of any error by 5:00 p.m. New York Time on the third (3rd) Local Business Day following receipt thereof. Failure of Party A to respond within such period shall not affect the validity or enforceability of such Transaction and shall be deemed to be an affirmation of such terms. The parties shall endeavor to conclude all transactions with a Confirmation signed by both parties. In the event they fail to do so, then the parties agree that they may submit other evidence, as well, in the event of a dispute, including, but not limited to, the Transaction Tape. If any disputes shall arise as to whether an error exists in a Confirmation, the parties shall resolve the dispute in good faith.
- (iv) Until a Confirmation is executed by both of the parties, the Transaction Tape is adopted by the parties as a means by which a Transaction is reduced to tangible form and the parties to a Transaction are identified and have authenticated a Transaction. Any Transaction formed and effectuated pursuant to the foregoing shall be considered "a writing" or "in writing" and to have been "signed" by both parties and any Transaction Tape shall be considered to constitute an "original" document evidencing the Transaction. A written Confirmation executed by both of the parties shall supercede and prevail over a Transaction Tape with respect to the subject Transaction.

- (v) The parties agree not to contest or assert a defense to the validity or enforceability of Transactions entered into in accordance with this Schedule under laws relating to (a) whether certain agreements are to be in writing or signed by the party to be bound thereby or (b) the authority of any employee of the party."

(l) **Consent to Recording.** The parties agree to amend Section 9 by adding a new Section 9(h) as follows:

"(h) **Consent to Recording.** The parties agree that each may electronically record all telephone conversations between them regarding any Transaction and the terms thereof, with or without the use of a warning tone, and that any such recordings may be submitted in evidence to any court or in any Proceeding for the purpose of establishing the formation or existence of any Transaction and the terms thereof. Each party hereby consents to such recording and agrees to obtain any necessary consent to, and provide notice of such recording to, its personnel and the personnel of its Affiliates."

(m) **Jurisdiction.** Section 13(b) of this Agreement is hereby deleted in its entirety and replaced with the following:

"(b) **Jurisdiction.** With respect to any suit, action, claim or proceedings relating to this Agreement ("Proceedings"), neither party waives any objection which it may have at any time to the laying of venue of any Proceedings brought in any court, waives any claim that such Proceedings have been brought in an inconvenient forum, nor waives the right to object, with respect to such Proceedings, that a court does not have any jurisdiction over such party. Nothing in this Agreement precludes either party from bringing Proceedings in any jurisdiction, nor will the bringing of Proceedings in any one or more jurisdictions preclude the bringing of Proceedings in any other jurisdiction."

(n) **Waiver of Jury Trial.** Section 13 of this Agreement is hereby amended by adding the following new Section 13 (e):

"(e) **EACH PARTY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY SUIT, ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY CREDIT SUPPORT DOCUMENT. EACH PARTY (I) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF THE OTHER PARTY OR ANY CREDIT SUPPORT PROVIDER HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF SUCH A SUIT, ACTION OR PROCEEDING, SEEK TO ENFORCE THE FOREGOING WAIVER AND (II) ACKNOWLEDGES THAT IT AND THE OTHER PARTY HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND PROVIDE FOR ANY CREDIT SUPPORT DOCUMENT, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.**"

(o) **Limitation of liability.** Section 13 of this Agreement is hereby amended by adding the following new Section 13(f):

"(f) **WITH RESPECT TO CLAIMS UNDER THIS AGREEMENT, NO PARTY SHALL BE REQUIRED TO PAY OR BE LIABLE FOR EXEMPLARY, PUNITIVE, INCIDENTAL, CONSEQUENTIAL, OR INDIRECT DAMAGES (WHETHER OR NOT ARISING FROM ITS NEGLIGENCE) TO ANY OTHER PARTY EXCEPT TO THE EXTENT THAT THE PAYMENTS REQUIRED TO BE MADE PURSUANT TO THIS AGREEMENT ARE DEEMED TO BE SUCH DAMAGES. IF AND TO THE EXTENT ANY PAYMENT REQUIRED TO BE MADE PURSUANT TO THIS AGREEMENT IS DEEMED TO CONSTITUTE LIQUIDATED DAMAGES, THE PARTIES ACKNOWLEDGE AND AGREE THAT SUCH DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE AND THAT SUCH PAYMENT IS INTENDED TO BE A REASONABLE APPROXIMATION OF THE AMOUNT OF SUCH DAMAGES AND NOT A PENALTY.**"

(p) **Default Rate.** With reference to Section 14 (Definitions), "Default Rate" shall be simple interest equal to the U.S. Prime Rate as quoted in the Money Rates section of The Wall Street Journal plus 2% per annum.

(q) **Reference Market-makers.** The definition of "**Reference Market-makers**" in Section 14 is hereby amended by deleting clause (b) thereof.

(r) **Confidentiality.** Each party agrees that this Agreement and all other documents relating to this Agreement and any information provided to it or its Credit Support Provider, if any, in connection therewith will be used only for purposes related to its relationship with the other party and will be kept confidential, subject to the following exceptions:

- (i) disclosure of information to affiliates, directors, employees, regulators, counsel, auditors, credit rating agencies, agents or other advisors of a party to whom it is necessary to show the information for purposes related to its relationship with the other party, each of whom will be informed of the confidential nature of the information;
- (ii) disclosure of information in any statement or testimony pursuant to a subpoena, summons or order by any court, government body, agency or authority, or otherwise required by law, order, regulation, ruling or in connection with applicable litigation;
- (iii) disclosure of information upon the request or demand of any regulatory authority;
- (iv) disclosure of information to potential or actual assignees, participants and/or other transfers of an interest in extensions of credit related to any contemplated transaction, but only in connection with assignments or transfers permitted under the terms of Section 7 of this Agreement (such entities will be subject to the same confidentiality provisions as those of the parties hereto);

- (v) disclosure of information about one of the parties that (a) is or becomes generally available to the public other than as a result of a disclosure by the other party or its representatives; (b) becomes available to the other party on a non-confidential basis from a source other than that party or one of its agents or (c) was known to the other party on a non-confidential basis or independently developed by the other party prior to its disclosure to the other party by that party or one of its agents; or
- (vi) disclosure of information to a rating agency in connection with such party's credit rating.

Each party acknowledges that routinely prepared credit memos or similar internal analysis may be based upon such confidential information, and will be subject to the same rules of confidentiality as stated above.

(s) **Limitation of Rate.** Notwithstanding any provision to the contrary contained in this Agreement, in no event shall the Default Rate, Non-default Rate, Termination Rate, or Interest Rate exceed the Highest Lawful Rate. For purposes hereof, "Highest Lawful Rate" shall mean, with respect to each party, the maximum non-usurious interest rate, if any, that at any time or from time to time may be contracted for, taken, reserved, charged, or received on the subject indebtedness under the law applicable to such party which is presently in effect or, to the extent allowed by law, may hereafter be in effect and which allows a higher maximum non-usurious interest rate than applicable law presently allows.

(t) **Severability.** If any term, provision, covenant, or condition of this Agreement, or the application thereof to any party or circumstance, shall be held to be invalid or unenforceable (in whole or in part) for any reason, the remaining terms, provisions, covenants and conditions hereof shall continue in full force and effect as if this Agreement had been executed with the invalid or unenforceable portion eliminated, so long as this Agreement as so modified continues to express, without material change, the original intentions of the parties as to the subject matter of this Agreement; provided, however, that this severability provision shall not be applicable if any provision of Section 2, 5, 6, or 13 (or any definition or provision in Section 14 to the extent it relates to, or is used in or in connection with any such Section) shall be so held to be invalid or unenforceable.

(u) **2002 ISDA Energy Agreement Bridge**

(l) **Energy Agreement Bridging Provisions**

(a) **Scope of Provision.** This provision will apply to this Agreement and all transactions into which the parties have entered or may enter as principal and in respect of which the confirmation or other confirming evidence supplements, forms part of or is subject to the terms of any Bridged Agreement (each a "Bridged Transaction").

(b) **Bridged Agreements.** For purposes of this provision, the following agreements between the parties, as amended from time to time, or any restatement or replacement thereof,

will constitute Bridged Agreements:

- (i) EEI Master Power Purchase & Sale Agreement, dated August 8, 2003, as amended; and
 - (ii) any agreement that the parties agree will be subject to the 2002 ISDA Energy Agreement Bridge.
- (c) ***Bridging Event.*** For purposes of this provision, a Bridging Event will occur:
- (i) (A) immediately upon the designation of an Early Termination Date as a result of the occurrence of an Event of Default under this Agreement, or (B) if Automatic Early Termination applies, immediately upon the deemed occurrence of an Early Termination Date; or
 - (ii) (A) immediately upon the designation, pursuant to the terms of the relevant Bridged Agreement and as a result of the occurrence of an event of default (however described) under a Bridged Agreement, unless that event of default is specified as an Excluded Event pursuant to paragraph (d) below, (a "Relevant Event") of a day on which all transactions outstanding under the Bridged Agreement will be accelerated, terminated or cancelled, as the case may be, in accordance with the provisions of the relevant Bridged Agreement, or (B) if transactions outstanding under the Bridged Agreement terminate automatically as a result of the occurrence of a Relevant Event, at the same time as those transactions terminate under the terms of the Bridged Agreement.
- (d) ***EXCLUDED EVENTS.*** FOR PURPOSES OF PARAGRAPH (C)(II) ABOVE, THE EVENTS SPECIFIED BELOW IN RESPECT OF THE FOLLOWING BRIDGED AGREEMENTS CONSTITUTE EXCLUDED EVENTS:

Not Applicable

(e) ***Effect of Bridging Event.***

- (i) If a Bridging Event described in paragraph (c)(i) above occurs:
 - (A) an event of default (however described) under each Bridged Agreement will be deemed to have occurred with respect to the party that is the Defaulting Party under this Agreement and in respect of all outstanding Bridged Transactions;
 - (B) the parties' delivery and payment obligations (and any other obligations they have under each relevant Bridged Agreement) in respect of any Bridged Transactions will be accelerated, terminated or cancelled, as the case may be, in accordance with the provisions of each relevant Bridged Agreement, so that (notwithstanding the provisions of each relevant Bridged Agreement) the acceleration, termination or cancellation will occur upon the occurrence or, if applicable pursuant to paragraph (c)(i) above, deemed occurrence of the Early Termination Date, and any relevant notices required to be given under the terms of each Bridged Agreement will be deemed to have been given with

effect from a date such that the acceleration, termination or cancellation will occur on the Early Termination Date;

(C) each Bridged Agreement will be deemed to constitute a Terminated Transaction for purposes of this Agreement; and

(D) for purposes of Section 6 of this Agreement, all amounts due or which otherwise would become due under Bridged Transactions or Bridged Agreements will be deemed to have been amounts due under Section 2(a)(i) on the Early Termination Date.

(ii) If a Bridging Event described in paragraph (c)(ii) above occurs:

(A) an event of default (however described) in respect of all outstanding Bridged Transactions under each other Bridged Agreement and an Event of Default under this Agreement will be deemed to have occurred with respect to the party that is the party in default under the relevant Bridged Agreement;

(B) the parties' delivery and payment obligations (and any other obligations they have under each relevant Bridged Agreement) in respect of any Bridged Transactions will be accelerated, terminated or cancelled, as the case may be, in accordance with the provisions of each relevant Bridged Agreement, so that (notwithstanding the provisions of each relevant Bridged Agreement) the acceleration, termination or cancellation will occur upon the deemed occurrence of an Early Termination Date pursuant to subparagraph (C) below, and any relevant notices required to be given under the terms of each Bridged Agreement will be deemed to have been given with effect from a date such that the acceleration, termination or cancellation will occur on the Early Termination Date;

(C) a notice designating an Early Termination Date will be deemed to have been given with effect from a date such that an Early Termination Date will occur on the day designated or, if applicable pursuant to paragraph (c)(ii) above, deemed to occur on which transactions outstanding under the Bridged Agreement in respect of which a Bridging Event occurred will be accelerated, terminated or cancelled, as the case may be;

(D) each Bridged Agreement will be deemed to constitute a Terminated Transaction for purposes of this Agreement; and

(E) for purposes of Section 6 of this Agreement, all amounts due or which otherwise would become due under Bridged Transactions or Bridged Agreements will be deemed to have been amounts due under Section 2(a)(i) on the Early Termination Date.

(f) **Payment Measure.** If Market Quotation is the applicable payment measure for purposes of Section 6(e), then the Market Quotation determined under Section 6(e) in relation to the Terminated Transaction constituted by a Bridged Agreement will be deemed to be zero,

and, if Loss is the applicable payment measure for purposes of Section 6(c), then the Loss determined under Section 6(e) in relation to that Terminated Transaction will be limited to the sum of the Unpaid Amounts determined in respect of that Terminated Transaction.

(g) **Inconsistency.** Where the provisions of this clause are inconsistent with the terms of any Bridged Agreement, the provisions of this clause will prevail, and, to the extent that the terms of a Bridged Agreement are inconsistent with the provisions of this clause, the Bridged Agreement is amended accordingly. In all other respects, the provisions of each Bridged Agreement, including the existence (before the occurrence of a Bridging Event under paragraph (c)(ii)) of any right to accelerate, terminate or cancel the parties' obligations under any Bridged Agreement, will not be affected by this provision.

(h) **Bridging Event under Paragraph (c)(i) to Prevail.** If an event or circumstance which would otherwise constitute or give rise to a Bridging Event under paragraph (c)(ii) above also constitutes a Bridging Event under paragraph (c)(i) above, it will be treated as a Bridging Event under paragraph (c)(i) and will not constitute a Bridging Event under paragraph (c)(ii).

(2) **Amendment to Definition of Unpaid Amounts**

The definition of "Unpaid Amounts" in Section 14 of this Agreement is amended:

- (a) by the deletion of the word "and" where it appears for the second time in the fourth line and its replacement with ","; and
- (b) the insertion of the following words after the words "for delivery" where they appear in the ninth line: "and
- (c) in respect of each Terminated Transaction consisting of a Bridged Agreement, any amounts due (or which would have become due but for Section 6(c)(ii)) to such party as a result of any acceleration, termination or cancellation, as the case may be, of the parties' obligations under that Bridged Agreement, either pursuant to the terms of the relevant Bridged Agreement or otherwise".

IN WITNESS WHEREOF the parties have executed this document as set forth below with effect from the date specified on the first page of this document.

DUKE ENERGY CAROLINAS, LLC

CARGILL POWER MARKETS, LLC

By: Lance Stotts
Name: Lance Stotts
Title: Vice President

By: Marc Monti
Name: Marc Monti
Title: Credit Manager

EXECUTION

ISDA[®]

International Swap Dealers Association, Inc.

CREDIT SUPPORT ANNEX

to the Schedule to the

1992 ISDA Master Agreement

dated as of May 14, 2010

between

DUKE ENERGY CAROLINAS, LLC ("Party A")

and

CARGILL POWER MARKETS, LLC ("Party B")

This Annex supplements, forms a part of, and is subject to, the above-referenced Agreement, is part of its Schedule and is a Credit Support Document under this Agreement with respect to each party.

Accordingly, the parties agree as follows:--

Paragraph 1. Interpretation

(a) **Definitions and Inconsistency.** Capitalized terms not otherwise defined herein or elsewhere in this Agreement have the meanings specified pursuant to Paragraph 12, and all references in this Annex to Paragraphs are to Paragraphs of this Annex. In the event of any inconsistency between this Annex and the other provisions of this Schedule, this Annex will prevail, and in the event of any inconsistency between Paragraph 13 and the other provisions of this Annex, Paragraph 13 will prevail.

(b) **Secured Party and Pledgor.** All references in this Annex to the "Secured Party" will be to either party when acting in that capacity and all corresponding references to the "Pledgor" will be to the other party when acting in that capacity; *provided, however*, that if Other Posted Support is held by a party to this Annex, all references herein to that party as the Secured Party with respect to that Other Posted Support will be to that party as the beneficiary thereof and will not subject that support or that party as the beneficiary thereof to provisions of law generally relating to security interests and secured parties.

Paragraph 2. Security Interest

Each party, as the Pledgor, hereby pledges to the other party, as the Secured Party, as security for its Obligations, and grants to the Secured Party a first priority continuing security interest in, lien on and right of Set-off against all Posted Collateral Transferred to or received by the Secured Party hereunder. Upon the Transfer by the Secured Party to the Pledgor of Posted Collateral, the security interest and lien granted hereunder on that Posted Collateral will be released immediately and, to the extent possible, without any further action by either party.

ISDA
International Swaps and Derivatives Association, Inc.

PARAGRAPH 13
to the
1994 CREDIT SUPPORT ANNEX

effective as of May 14, 2010

between

Duke Energy Carolinas, LLC ("Party A")
and
Cargill Power Markets, LLC ("Party B")

Paragraph 13. Elections and Variables

- (a) ***Security Interest for "Obligations"***. The term "***Obligations***" as used in this Annex has the meaning specified in Paragraph 12 and includes the following additional obligations:

With respect to Party A: All Obligations with respect to any and all Specified Transactions.

With respect to Party B: All Obligations with respect to any and all Specified Transactions.

- (b) ***Credit Support Obligations.***

- (i) ***Delivery Amount, Return Amount and Credit Support Amount:***

(A) "***Delivery Amount***" has the meaning specified in Paragraph 3(a).

(B) "***Return Amount***" has the meaning specified in Paragraph 3(b).

(C) "***Credit Support Amount***" has the meaning specified in Paragraph 3.

- (ii) ***Eligible Collateral.*** The following items will qualify as "***Eligible Collateral***" for the party specified:

	<u>Party A</u>	<u>Party B</u>	<u>Valuation Percentage</u>
Cash	[X]	[X]	100%

- (iii) ***Other Eligible Support.*** The following item will qualify as "***Other Eligible Support***" for Party A and for Party B: a "Letter of Credit"(as defined in Paragraph 13 (i) (v) "Additional Definitions"). See Paragraph 13(i) for further provisions regarding letters of credit. The Valuation Percentage shall be 100% of the Value of the Other Eligible Support unless (i) a Letter of Credit

Default shall apply with respect to such Letter of Credit, or (ii) twenty (20) or fewer Business Days remain prior to the expiration of such Letter of Credit, in either of which case the Valuation Percentage shall be zero (0).

(iv) The "**Independent Amount**" is zero with respect to both Party A and Party B.

(v) **Thresholds.** "Threshold" means

S&P Credit Rating	Moody's Credit Rating	Threshold Amount
A- And above	A3 and Above	\$15,000,000
BBB+	Baa1	\$12,500,000
BBB	Baa2	\$10,000,000
BBB-	Baa3	\$5,000,000
BB+ or lower	Ba1 or lower	Zero

(vi) "**Minimum Transfer Amount**". The Minimum Transfer Amount shall be zero for both Party A and Party B.

(vii) **Rounding.** The Delivery Amount and the Return Amount will be rounded up and down to the nearest integral multiple of \$100,000, respectively.

(c) **Valuation and Timing.**

(i) "**Valuation Agent**" means, for purposes of Paragraphs 3 and 5, the party making the demand under Paragraph 3, and for the purposes of Paragraph 6(d), the Secured Party receiving or deemed to receive the Distributions or the Interest Amount, as applicable, provided, however, that in all cases, if an Event of Default, or Potential Event of Default, has occurred and is continuing with respect to the party designated as the Valuation Agent, then in such case, and for so long as the Event of Default or Potential Event of Default continues, the other party will be the Valuation Agent.

(ii) "**Valuation Date**" means at the request of either party, any Local Business Day which, if treated as a Valuation Date, would result in a Delivery Amount or Return Amount.

(iii) "**Valuation Time**" means the close of business on the Local Business Day before the Valuation Date or date of calculation, as applicable, or any time on the Valuation Date or date of calculation, as applicable; provided that the calculations of Value and Exposure will be made as of approximately the same time on the same date.

(iv) "**Notification Time**" means 1:00 p.m. New York time on a Local Business Day.

(d) **Conditions Precedent and Secured Party's Rights and Remedies.** The following Termination Event(s) will be a "**Specified Condition**" for the party specified (that party being the Affected Party if the Termination Event occurs with respect to that party):

Party A

Party B

Illegality	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tax Event	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Tax Event Upon Merger	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Credit Event Upon Merger	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Additional Termination Event(s):	<input type="checkbox"/>	<input type="checkbox"/>
Additional Event of Default	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

(e) ***Substitution.***

- (i) ***"Substitution Date"*** has the meaning specified in Paragraph 4(d)(ii).
- (ii) ***Consent.*** If specified here as applicable, then the Pledgor must obtain the Secured Party's consent for any substitution pursuant to Paragraph 4(d): Inapplicable.

(f) ***Dispute Resolution.***

- (i) ***"Resolution Time"*** means 5:00 p.m., New York Time, on the Local Business Day following the date on which the notice is given that gives rise to a dispute under Paragraph 5.
- (ii) ***Value.*** For the purpose of Paragraphs 5(i)(C) and 5(ii), the Value of Posted Credit Support will be calculated as follows: (i) in the case of cash, the face amount thereof. ***"Value"*** with respect to Other Eligible Support and Other Posted Support means the undrawn portion of any Letter of Credit maintained by the Pledgor (or its Credit Support Provider) for the benefit of the Secured Party, multiplied by the Valuation Percentage.
- (iii) ***Alternative.*** The provisions of Paragraph 5 will apply, except to the following extent:

The Disputing Party will notify the Valuation Agent of any dispute not later than close of business on the Local Business Day that the demand or Transfer is made under Paragraph 3. Pending the resolution of a dispute, Transfer of the undisputed Value of Eligible Credit Support or Posted Credit Support involved in the relevant demand will be due not later than the close of business on the Local Business Day after the demand was made under Paragraph 3 if the demand is made at or before the Notification Time, and will be due on the second Local Business Day after the demand if the demand is made after the Notification Time. If the parties resolve the disputed Value of Eligible Credit Support or Posted Credit Support (the "Disputed Amount") prior to the Resolution Time, the Disputed Amount is due is not later than the close of business on the Local Business Day after the demand was made. If the parties resolve the Disputed Amount after the Resolution Time, it is due on the second Local Business Day after the demand was made.

(g) ***Holding and Using Posted Collateral.***

- (i) ***Eligibility to Hold Posted Collateral; Custodians.*** Party A will be entitled to hold Posted Collateral pursuant to Paragraph 6(b) *provided* that the conditions set out in (A) below are satisfied. A Custodian for Party A will be entitled to hold Posted Collateral pursuant to Paragraph 6(b) *provided* that conditions set out in (B) below are satisfied.

(A) (i) Party A is not a Defaulting Party; and

- (ii) The Credit Rating of Party A is at least BBB- (in the case of S&P) and Baa3 (in the case of Moody's).
- (B) (i) The Custodian is a bank or trust company located in the United States having total assets of at least US \$10,000,000,000 (ten billion); and
- (ii) The Credit Rating of the Custodian is at least A- (in the case of S&P) and A3 (in the case of Moody's)

Initially, Party A has not selected a Custodian.

Party B will be entitled to hold Posted Collateral pursuant to Paragraph 6(b) *provided* that the conditions set out in (A) below are satisfied. A Custodian for Party B will be entitled to hold Posted Collateral pursuant to Paragraph 6(b) *provided* that the conditions set out in (B) below are satisfied:

- (A) (i) Party B and its credit support provider is not a Defaulting Party; and
- (ii) The Credit Rating of Party B is at least BBB- (in the case of S&P) and Baa3 (in the case of Moody's).
- (B) (i) The Custodian is a bank or trust company located in the United States having total assets of at least US \$10,000,000,000 (ten billion); and
- (ii) The Credit Rating of the Custodian is at least A- (in the case of S&P) and A3 (in the case of Moody's)

Initially, Party B has not selected a Custodian.

All Posted Collateral shall be held in accounts located in the United States of America.

(ii) ***Use of Posted Collateral.*** The provisions of Paragraph 6(c) will apply to either Party A and Party B unless and until the credit rating of such Party or its Credit Support Provider, as the case may be, falls below Baa3 (Moody's) or BBB- (S&P), and thereafter the provisions of Paragraph 6(c) will not apply to such Party.

(h) ***Distributions and Interest Amount.***

(i) ***Interest Rate.*** The "Interest Rate" will be a per annum rate of interest equal to the Federal Funds Rate. "Federal Funds Rate" means, for any day, an interest rate per annum equal to the Federal Funds Rate as published by the Federal Reserve Bank in the H.15 Release.

(ii) ***Transfer of Interest Amount.*** The Transfer of the Interest Amount will be made on the third Local Business Day following each calendar month that Posted Collateral in the form of Cash is held by the Secured Party pursuant to Paragraph 3.

(i) ***Other Eligible Support and Other Posted Support.***

(i) **"Value"** with respect to Other Eligible Support means the amount of any Letter of Credit, which has not been drawn, maintained by the Pledgor (or its Credit Support Provider) for the benefit of the Secured Party.

(ii) **"Transfer"** with respect to Other Eligible Support and Other Posted Support means:

(1) For purposes of Paragraph 3(a), delivery of the Letter of Credit by the Pledgor or issuer of the Letter of Credit to the Secured Party at the address of the Secured Party specified in the Notices Section of this Agreement, or delivery of an executed amendment to such Letter of Credit (extending the term or increasing the amount available to the Secured Party thereunder) by the Pledgor or the issuer of the Letter of Credit to the Secured Party at the address of the Secured Party specified in the Notices Section of this Agreement; and

(2) For purposes of Paragraph 3(b), by the return of an outstanding Letter of Credit by the Secured Party to the Pledgor or the Issuer of the Letter of Credit, at the address of the Pledgor or the Issuer specified in the Notices Section of this Agreement, or delivery of an executed amendment to the Letter of Credit in form and substance satisfactory to the Pledgor (reducing the amount available to the Secured Party thereunder) by the Pledgor or the issuer of the Letter of Credit to the Secured Party at the Secured Party's address specified in the Notices Section of this Agreement. If a Transfer is to be effected by a reduction in the amount of an outstanding Letter of Credit previously issued for the benefit of the Secured Party, the Secured Party shall not unreasonably withhold its consent to a commensurate reduction in the amount of such Letter of Credit and shall take such action as is reasonably necessary to effectuate such reduction.

(iii) **"Letter of Credit Provisions"**. Other Eligible Support and Other Posted Support provided in the form of a Letter of Credit shall be subject to the following provisions.

(1) Unless otherwise agreed in writing by the parties, each Letter of Credit shall be provided in accordance with the provisions of this Annex, and each Letter of Credit shall be maintained for the benefit of the Secured Party. The Pledgor shall (i) renew or cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit, (ii) if the bank that issued an outstanding Letter of Credit has indicated its intent not to renew such Letter of Credit, provide a substitute Letter of Credit at least twenty (20) Business Days prior to the expiration of the outstanding Letter of Credit, and (iii) if a bank issuing a Letter of Credit shall fail to honor the Secured Party's properly documented request to draw on an outstanding Letter of Credit, the Pledgor shall provide for the benefit of the Secured Party, (x) a substitute Letter of Credit, that is issued by a bank acceptable to the Secured Party, other than the bank failing to honor the outstanding Letter of Credit, or (y) Eligible Collateral, in each case within two (2) Business Day after the Pledgor receives notice of such refusal, provided that, as a result of the Pledgor's failure to perform in accordance with (i), (ii), or (iii) above, the Delivery Amount applicable to the Pledgor equals or exceeds the Pledgor's Minimum Transfer Amount.

(2) As one method of providing Eligible Credit Support, the Pledgor may increase the amount of an outstanding Letter of Credit or establish one or more additional Letters of Credit.

(3) (i) A Letter of Credit shall provide that the Secured Party may draw upon the Letter of Credit in an amount (up to the face amount for which the Letter of Credit has been issued) that

is equal to all amounts that are due and owing from the Pledgor but have not been paid to the Secured Party within the time allowed for such payments under this Agreement (including any related notice or grace period or both). A Letter of Credit shall provide that a drawing be made on the Letter of Credit submission to the bank issuing the Letter of Credit of one or more certificates specifying the amounts due and owing to the Secured Party in accordance with the specific requirements of the Letter of Credit; (ii) If the Pledgor shall fail to renew, substitute, or sufficiently increase the amount of an outstanding Letter of Credit (as the case may be), or establish one or more additional Letters of Credit, or otherwise provide sufficient Eligible Credit Support and if the Delivery Amount applicable to the Pledgor equals or exceeds the Pledgor's Minimum Transfer Amount as a result of such failure, then the Secured Party may draw on the entire, undrawn portion of any outstanding Letter of Credit upon submission to the bank issuing such Letter of Credit of one or more certificates specifying the amounts due and owing to the Secured Party in accordance with the specific requirements of the Letter of Credit. Cash proceeds received from drawing upon the Letter of Credit shall be deemed Eligible Credit Support and shall be maintained in accordance with this annex. The Pledgor shall remain liable for any amounts due and owing to the Secured Party and remaining unpaid after the application of the amounts so drawn by the Secured Party.

(4) If a party's Credit Support Provider shall furnish a Letter of Credit hereunder, the amount otherwise required under such Letter of Credit may at the option of such Credit Support Provider be reduced by the amount of any Letter of Credit established by such party (but only for such time as such party's Letter of Credit shall be in effect). If a party shall be required to furnish a Letter of Credit hereunder, the amount otherwise required under such Letter of Credit may at the option of such party be reduced by the amount of any Letter of Credit established by such party's Credit Support Provider (but only for such time as such Credit Support Provider's Letter of Credit shall be in effect).

(5) Upon the occurrence of a Letter of Credit Default, the Pledgor agrees to deliver a substitute Letter of Credit or other Eligible Credit Support to the Secured Party in an amount at least equal to that of the Letter of Credit to be replaced on or before the first (1st) Business Day after written demand by the Secured Party (or the third (3rd) Business Day if only clause (i) under the definition of Letter of Credit Default applies).

(6) Notwithstanding Paragraph 10, in all cases, the costs and expenses (including but not limited to the reasonable costs, expenses, and external attorney's fees of the Secured Party) of establishing, renewing, substituting, canceling, increasing and reducing the amount of (as the case may be) one or more Letters of Credit shall be borne by the Pledgor.

(iv) ***"Certain Rights and Remedies".***

(1) ***Secured Party's Rights and Remedies.*** For purposes of paragraph 8(a)(ii), the Secured Party may draw on any outstanding Letter of Credit (Other Posted Support) in an amount equal to any payments payable by the Pledgor with respect to any Obligations.

(2) ***Pledgor's Rights and Remedies.*** For purposes of Paragraph 8(b)(ii), (i) the Secured Party will be obligated immediately to Transfer any Letter of Credit (Other Posted Support) to the Pledgor and (ii) the Pledgor may do any one or more of the following: (x) to the extent that the Letter of Credit (Other Posted Support) is not Transferred to the Pledgor as required pursuant to (i) above, Set-off any amounts payable by the Pledgor with respect to any Obligations against any such Letter of Credit (Other Posted Support) held by the Secured Party and to the extent its rights to Set-off are not exercised, withhold payment of any remaining amounts payable by the Pledgor with respect to any Obligations, up to the Value of any remaining Posted Collateral and the Value of any Letter of Credit (Other Posted Support) held by the Secured Party, until any such Posted Collateral and such Letter of Credit (Other Posted Support) is Transferred to the Pledgor; and (y) exercise rights and remedies available to the Pledgor under the terms of the Letter of Credit.

(v) ***"Additional Definitions".*** As used in this Annex:

"Cash", the definition of "Cash" in Paragraph 12 is deleted in its entirety and the following substituted therefore:

"Cash" shall mean United States Dollars, or such other currency which is acceptable to the Pledgee, in each case, in immediately available funds.

"Credit Rating" shall mean the rating then assigned to such entity's unsecured, senior long-term debt obligations (not supported by third party credit enhancements) or if such entity does not have a rating for its senior unsecured long-term debt, then the rating then assigned to such entity as an issues rating by S&P, Moody's or any other rating agency agreed by the Parties.

"Letter of Credit" shall mean an irrevocable, non-transferable, standby Letter of Credit, issued by a major U.S. commercial bank or by a U.S. branch office of a foreign bank with a Credit Rating of at least "A-" by S&P or "A3" by Moody's, in a fully enforceable form that is acceptable to the party in whose favor the Letter of Credit is issued. All costs relating to any such Letter of Credit shall be for the account of the Pledgor. The Secured Party shall consent to and take all necessary actions as required to reduce or cancel, as the case may be, a Letter of Credit to the extent a Delivery Amount would not be created thereby (as of the time of the request or as of the last time the Credit Support Amount was determined).

"Letter of Credit Default" shall mean with respect to an outstanding Letter of Credit, the occurrence of any of the following events: (i) the issuer of the Letter of Credit shall fail to maintain a Credit Rating of at least "A-" by S&P or "A3" by Moody's, (ii) the issuer of the Letter of Credit shall fail to comply with or perform its obligations under such Letter of Credit if such failure shall be continuing after the lapse of any applicable grace period; (iii) the issuer of such Letter of Credit shall disaffirm, disclaim, repudiate or reject, in whole or in part, or challenge the validity of, such Letter of Credit; (iv) such Letter of Credit shall expire or terminate, or shall fail or cease to be in full force and effect at any time during the term of the Agreement, as required by this Credit Support Annex; or (v) any event analogous to an event specified in Section 5(a)(vii) of this Agreement shall occur with respect to the issuer of such Letter of Credit provided, however, that no Letter of Credit Default shall occur in any event with respect to a Letter of Credit after the time such Letter of Credit is required to be canceled or returned to the Pledgor in accordance with the terms of this Annex.

"*Moody's*" shall mean Moody's Investor Services, Inc., or its successor.

"*S&P*" shall mean the Standard & Poor's Rating Group, a division of The McGraw-Hill Companies, Inc. or Standard & Poor's Rating Services, a division of The McGraw-Hill Companies, Inc. ("*S&P*"), as applicable, or its successor.

(j) ***Demand and Notices.*** All demands, specifications and notices under this Annex will be made pursuant to the Notices Section of this Agreement, unless otherwise specified here:

Party A:

Address: Duke Energy.
526 S. Church Street, EC204Z
Charlotte, NC 28202

Attention: Credit Risk Management
Telephone No.: (704) 382-5903
Facsimile No.: (704) 382-1241

Party B:

Cargill Power Markets, LLC
Mailstop #150
9350 Excelsior Blvd.
Hopkins, MN 55343
USA
Attention: Credit Department
Telephone: 952-984-3660
Facsimile: 952-984-3763

(k) ***Addresses for Transfers.***

Party A: Payment to: PNC Bank, Ohio
For Account of: Duke Energy Carolinas, LLC
Account #: 40-0690-7111
Federal ABA#: 042000398

Party B: To be specified in each notice.

(l) ***Other Provisions.***

(i) The Credit Support Annex is a Security Agreement under the Uniform Commercial Code ("*UCC*") of the State of New York.

(ii) Paragraph 8(a) is hereby amended by inserting a comma after the word "continuing" on the second line and deleting the word "or"; and in the fourth line after the phrase "with respect to the Pledgor," add the following:

“(3) an Event of Default under the EEI Agreement with respect to the Pledgor has occurred and is continuing, or (4) an Early Termination Event has occurred or been designated as the result of an Event of Default under the EEI Agreement with respect to the Pledgor,”

(iii) The definition of “Exposure” in Paragraph 12 of the Credit Support Annex is hereby deleted and replaced with the following:

“Exposure” shall mean for any Valuation Date or other date for which Exposure is calculated, and subject to Paragraph 5 in the event of a dispute, the sum of:

(i) for all Power Transactions (as defined in the Schedule to the Master Agreement):

(a) a Settlement Amount for each Power Transaction then outstanding, as determined in a commercially reasonable manner consistent with the requirements of Section 5.2 of the EEI Agreement, and for each such Power Transaction is (i) the amount that would be payable to a party that is the Secured Party by the other party shall be expressed as a positive number and (ii) the amount that would be payable by a party that is the Secured Party to the other party shall be expressed as a negative number; plus

(b) Unpaid Amounts (i) owed by a party that is not the Secured Party to the Secured Party, with respect to the Power Transactions for periods prior to the Valuation Date expressed as a positive number, and (ii) the Unpaid Amounts owed by the Secured Party to the other party with respect to such Power Transaction for periods prior to the Valuation Date expressed as a negative number. For purposes of this paragraph, “Unpaid Amounts” shall mean the amount payable by one party to the other party, that has not been paid as of the Valuation Date with respect to performance rendered or provided under a Power Transaction, whether such amount is then due and owing, such as but not limited to (x) an invoiced amount, (y) an uninvoiced amount and/or an amount payable due to physical deliveries or settlements that occurred prior to the Valuation Date, and (z) liquidated damages, taxes or other such costs and expenses that arose prior to the Valuation Date otherwise allowed under the terms of the EEI Agreement or a Power Transaction; plus

(ii) for Transactions under this Master Agreement:

(c) the amount, if any, that would be payable to a party that is the Secured Party by the other party (expressed as a positive number) or by a party that is the Secured Party to the other party (expressed as a negative number) pursuant to Section 6(e)(ii)(2)(A) of this Agreement as if all Transactions (or Swap Transactions) were being terminated as of the relevant Valuation Time.

provided that Market Quotation and Market Value will be determined by the Valuation Agent using its estimates at mid-market of the amounts that would be

paid for Replacement Transactions (as that term is defined in the definition of "Market Quotation")."

IN WITNESS WHEREOF the parties have executed this document as set forth below with effect from the date specified on the first page of this document.

2w
DUKE ENERGY CAROLINAS, LLC

*MRB
ppl's
on behalf of*
By: *Y e Stotts*

Name: *Lance Stotts*

Title: *Vice President*

CARGILL POWER MARKETS, LLC

By: *Marc Mortl*

Name: *Marc Mortl*

Title: *Credit Manager*

PEC-Cargill PSA

**MASTER POWER PURCHASE AND SALE AGREEMENT
CONFIRMATION LETTER**

This is a confirmation (the "Confirmation") dated March 20, 2012, between Progress Energy Carolinas, Inc. ("PEC") and Cargill Power Markets, LLC("Buyer") (individually a "Party" and collectively the "Parties"). The Parties agree as follows:

COMMERCIAL TERMS

General: PEC will sell and deliver, and Buyer will purchase and receive, the Quantity of Capacity and Energy every hour during the Delivery Period.

Product: Capacity and Firm (LD) Energy, as defined in Schedule P of the EEI Master Agreement. PEC will not use the Capacity sold hereunder to meet its planning or operational reserve requirements. The Energy will be delivered from PEC's generating resources.

Quantity: 100 MW On-Peak (Monday to Friday 0700-2300 EPT),
100 MW Off-Peak (Monday to Sunday 2300-0700 EPT and Saturday and Sunday 0700-2300 EPT)

Term: Begins the first day after the date of the closing of the Merger, but not earlier than June 1, 2012 and not later than August 1, 2012 and ends August 31, 2014. Within five Business Days after all regulatory approvals required for the closing of the Merger have been obtained, PEC will give notice to Buyer of the closing date of the Merger. The "Merger" means the merger between Progress Energy, Inc and Duke Energy Corporation ("DEC") which has been conditionally approved by the Federal Energy Regulatory Commission ("FERC") in FERC docket EC11-60.

Delivery Period: The period beginning at 0000 EPT on the first day after the date of the closing of the Merger, but not earlier than June 1, 2012 and not later than August 1, 2012, and ending at 2400 EPT on August 31, 2014.

Payment: Buyer shall pay to PEC the Monthly Capacity Price for the entire Delivery Period and shall pay to PEC the Energy Price for all Energy delivered hereunder.

Monthly Capacity Price:

Month	ON-Peak Capacity Price \$/kW- month	OFF-Peak price \$/kW- month	\$ CPL On	\$ CPL Off
June 2012	0.180	0.033	18,000	3,333
July 2012	0.380	0.133	38,000	13,333
August 2012	0.380	0.133	38,000	13,333
June 2013	(2.000)	(3.900)	(200,000)	(390,000)
July 2013	0.400	(1.700)	40,000	(170,000)
August 2013	0.400	(1.700)	40,000	(170,000)
June 2014	(1.733)	(2.867)	(173,333)	(286,667)
July 2014	(0.420)	(2.200)	(42,000)	(220,000)
August 2014	(0.367)	(2.680)	(36,667)	(268,000)

For the avoidance of doubt, amounts in parentheses shall be paid by PEC to Buyer. If the first day of the Term falls on any day other than the first day of a calendar month, the Monthly Capacity Payment for that month shall be prorated on a daily basis.

Energy Price:

On-Peak: the product of the On-Peak Heat Rate times the Gas Index

Off-Peak: the product of the Off-Peak Heat Rate times the Gas Index

Gas Index:	Daily Index price for natural gas in MMBtu, as reported in the Platts Publication Gas Daily, under the heading Transco Zone 5
Heat Rates:	On-Peak: 10.0 MMBtu/MWh Off-Peak: 7.0 MMBtu/MWh
Delivery Point:	CPLE system busbar
Transmission:	Buyer shall obtain transmission service and any Ancillary Services required for transmission of the Energy from the Delivery Point.

Energy Scheduling:

Buyer shall purchase and schedule the full Quantity of Energy during all hours of the Delivery Period unless excused under the terms of this Agreement. Prior to 0930 EPT of the day prior to the day of delivery of the Energy, Buyer will request transmission service sufficient to transmit the full Quantity of Energy from the Delivery Point to the ultimate sink. To the extent the ultimate sink is the PJM Interconnection and Buyer has requested and been denied PJM Spot In (or equivalent no reservation fee import service), Buyer shall request non-firm point to point import transmission service. By no later than 0930 EPT of the day prior to the day of delivery of the Energy, Buyer will provide written notice (the "0930 Notice") to DEC stating the quantity of Energy of which Buyer will take delivery and the transmission path from the Delivery Point to the ultimate sink for which Buyer obtained or attempted to obtain transmission service.

If the 0930 Notice states that Buyer will not take delivery of the full Quantity, then Buyer shall state the reason. If the 0930 Notice states that Buyer will not take delivery of the full Quantity of Energy because Buyer was unable to obtain transmission service sufficient to transmit the full Quantity from the Delivery Point to the ultimate sink, then, by no later than 1530 EPT, Buyer shall provide another written notice (the "1530 Notice") to DEC stating the additional quantity of Energy (up to the full Quantity of Energy) for which Buyer has obtained transmission service on the same path as the 0930 Notice and of which Buyer will take delivery. If the 0930 Notice and 1530 Notice, if any, state that Buyer will not take delivery of the full Quantity of Energy, then DEC shall be excused from its obligation to deliver the quantity of Energy. For the avoidance of doubt, Buyer's failure to submit requests for sufficient transmission service (firm, Spot In, and/or non-firm) or to give notice to DEC in accordance with the deadlines set forth in this provision will constitute an unexcused failure to receive; otherwise Buyer's performance will be excused.

OTHER PROVISIONS

1. Conditions Precedent

(a) It is a condition precedent to the Parties' obligations hereunder that the closing of the Merger occurs by July 31, 2012.

(b) It is a condition precedent to the Parties' obligations hereunder that this Confirmation is accepted by FERC by July 31, 2012 as a PEC rate schedule under the Federal Power Act without modification, suspension, investigation or other condition (including setting this Confirmation, or part thereof, for hearing) unacceptable to PEC. PEC will give notice to the Buyer within two Business Days after this condition has been satisfied.

2. EEI Master Agreement

(a) The transaction described in this Confirmation constitutes a Transaction entered into under and subject to the EEI Master Power Purchase and Sale Agreement between the Parties dated March 20, 2012, as amended as follows (the "EEI Master Agreement").

(b) As applied to this Confirmation only, Section 1.23 of the EEI Master Agreement is hereby amended so that it reads in its entirety as follows: "Force Majeure" means an event or circumstance which prevents one Party from performing its obligations under one or more Transactions, which event or circumstance was not anticipated as of the date the Transaction was agreed to, which is not within the reasonable control of, or the result of the negligence of, the Claiming Party, and which, by the exercise of due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided. Force Majeure shall not be based on (i) the loss of Buyer's markets; (ii) Buyer's inability economically to use or resell the Product purchased hereunder; (iii) the loss or failure of Seller's supply; or (iv) Seller's ability to sell the Product at a price greater than the Contract Price. Notwithstanding the foregoing, it shall be a Force Majeure, the performance of Buyer shall be excused, and no damages shall be payable, including any amounts determined pursuant to Article Four, if the transmission is unavailable or interrupted or curtailed for any reason, at anytime, anywhere from the Delivery Point to the Buyer's proposed ultimate sink, regardless of whether transmission, if any, that Buyer is attempting to secure and/or has purchased for the Product is firm or non-firm. If the transmission (whether firm or non-firm) that Buyer is attempting to secure is unavailable, this contingency excuses performance by the Buyer for the duration of the unavailability. If the transmission (whether firm or non-firm) that Buyer has secured from the Delivery Point to the sink is interrupted or curtailed for any reason, this contingency excuses performance by the Buyer for the duration of the interruption or curtailment. The applicability of Force Majeure to the Transaction is governed by the terms of the Product and Related Definitions contained in Schedule P.

(c) As applied to this Confirmation only, Section 1.53 of the EEI Master Agreement is hereby amended so that it reads in its entirety as follows: "'Sales Price' equals zero under all circumstances."

3. Entire Agreement

This Confirmation (along with the EEI Master Agreement) constitutes the entire and integrated agreement between the Parties relating to the rates, terms, and conditions set out in this Confirmation. This Confirmation supersedes all prior agreements whether oral or written related to the subject matter of this Confirmation.

The Parties have executed this Confirmation through their duly authorized representatives on the dates set forth below.

PROGRESS ENERGY CAROLINAS, INC.

CARGILL POWER MARKETS, LLC

By: 

By: 

Name:

Alexander (Sasha) Weintraub

Name: John Ivey

Title:

Vice President - Fuels and Power Optimization

Title: Authorized Signer

Date:

March 22 2012

Date: 3-20-2012

**MASTER POWER PURCHASE AND SALE AGREEMENT
COVER SHEET**

This *Master Power Purchase and Sale Agreement* ("Master Agreement") is made as of the following date: March 20, 2012 ("Effective Date"). The *Master Agreement*, together with the exhibits, schedules and any written supplements hereto, the Party A Tariff, if any, the Party B Tariff, if any, any designated collateral, credit support or margin agreement or similar arrangement between the Parties and all Transactions (including any confirmations accepted in accordance with Section 2.3 hereto) shall be referred to as the "Agreement." The Parties to this *Master Agreement* are the following:

Name: Carolina Power & Light Company d/b/a
Progress Energy Carolinas, Inc. "PEC" or "Party A"

Name: Cargill Power Markets, LLC "Cargill"
or "Party B"

All Notices: P. O. Box 1551

Street: 410 South Wilmington Street

City: Raleigh, NC Zip: 27601

Attn: General Counsel
Phone: 919-546-7501
Facsimile: 919-546-3805
Duns: 00-699-7217
Federal Tax ID Number: 56-0165465

Invoices:

Attn: Fuels & Power Optimization
Phone: 919-546-7518
Facsimile: 919-546-3258

Scheduling:

Attn: Hourly Desk
Phone: 919-546-6639
Facsimile: 919-546-3374

Payments:

Attn: Fuels & Power Optimization
Phone: 919-546-7518
Facsimile: 919-546-3258

Confirmations:

Attn: Confirmations
Phone: 919-546-2419
Facsimile: 919-546-3258

ACH Transfer:

BNK: Wells Fargo
ABA: 121000248
ACCT: 2062660000020

Credit and Collections:

Attn: Risk Management
Phone: 919-546-5161
Facsimile: 919-546-7826

With additional Notices of an Event of Default or
Potential Event of Default to:

Attn: Carolina Power & Light Company d/b/a
Progress Energy, Carolinas, Inc.
Attn: Vice President-Fuels and Power Optimization
Phone: 919-546-6299
Facsimile: 919-546-4640

All Notices:

Street: 9350 Excelsior Blvd, MS 150

City: Hopkins, MN Zip: 55343

Attn: Contract Administration
Phone: 952-984-4113
Facsimile: 952-984-3627
Duns: 01-286-1723
Federal Tax ID Number: 41-1889936

Invoices:

Attn: Powerinvoices@cargill.com
Phone: 952-984-3947
Facsimile: 952-367-0920

Scheduling:

Attn: Power Scheduler
Phone: 952-984-4019
Facsimile: 952-984-3736

Payments:

Attn: Accounts Receivable
Phone: 952-984-3947
Facsimile: 952-984-3836

Confirmations:

Attn: Powerconfirmations@cargill.com
Phone: 952-984-3070
Facsimile: 952-984-0919

ACH Transfer:

BNK: JP Morgan Chase Bank, N.A.
ABA: 021000021
ACCT: 51-01913

Credit and Collections:

Attn: Credit Analyst
Phone: 952-984-3430
Facsimile: 952-249-4216

With additional Notices of an Event of Default or
Potential Event of Default to:

Attn: Gene Becker
Phone: 952-984-3158
Facsimile: 952-984-3627

The Parties hereby agree that the General Terms and Conditions are incorporated herein, and to the following provisions as provided for in the General Terms and Conditions:

Party A Tariff:

Tariff:

Dated:

Docket #:

Party B Tariff:

Tariff: Market Based

Dated:

Docket #:

Article Two

Transaction Terms and Conditions

☒ Optional provision in Section 2.4. If not checked, inapplicable.

Article Four

Remedies for Failure
to Deliver or Receive

☒ Accelerated Payment of Damages. If not checked, inapplicable.

Article Five

Events of Default; Remedies

☒ Cross Default for Party A:

☒ Party A: Single or multiple
event(s) equal to or greater than
the Cross Default Amount

Cross Default Amount:
100,000,000

☐ Other Entity:
(parent name of Party A)

Cross Default Amount:

☒ Cross Default for Party B:

☐ Party B: Single or multiple
event(s) equal to or greater than
the Cross Default Amount

Cross Default Amount:

☒ Other Entity: Cargill
Incorporated

Cross Default Amount:
\$100,000,000

5.6 Closeout Setoff

- ☒ Option A (Applicable if no other selection is made.)
☐ Option B - Affiliates shall have the meaning set forth in the
Agreement
☐ Option C (No Setoff)

Article Eight

Credit and Collateral Requirements

8.1 Party A Credit Protection:

(a) Financial Information:

- ☐ Option A
☐ Option B Specify:
☒ Option C Specify: Specify: Cargill Incorporated audited
financials as soon as practicable after demand Such audited
financials shall be provided as soon as practicable after
demand; provided, however that the Party A shall first use
commercially reasonable efforts to obtain such information
from publicly available sources.

(b) Credit Assurances:

- ☐ Not Applicable
☒ Applicable

(c) Collateral Threshold:

- ☐ Not Applicable

☒ Applicable

If applicable, complete the following:

Party B Collateral Threshold: The lower of (i) the amount set forth below under the heading "Credit Limit" opposite the Credit Rating for **Party B and/or Party B's Guarantor**, as of any valuation date, or (ii) the amount of the any dollar limit contained in a guaranty provided by Party B's Guarantor ("Guarantee Amount"), or (iii) zero if an Event of Default or a Potential Event of Default exists with respect to **Party B and/or Party B's Guarantor** has occurred and is continuing.

In the event that the Guarantee Amount of Party B's Guarantor's guaranty shall be less than the applicable Credit Limit, Party B shall be entitled to increase its Collateral Threshold by causing Party B's Guarantor to increase the Guarantee Amount to an amount that is no greater than the applicable Credit Limit.

<u>S&P/Fitch</u>	<u>Moody's</u>	<u>Credit Limit (US Funds)</u>
AAA	Aaa	\$30,000,000
AA+	Aa1	\$30,000,000
AA	Aa2	\$30,000,000
AA-	Aa3	\$30,000,000
A+	A1	\$25,000,000
A	A2	\$25,000,000
A-	A3	\$25,000,000
BBB+	Baa1	\$20,000,000
BBB	Baa2	\$15,000,000
BBB-	Baa3	\$10,000,000
BB+ or below	Ba1 or lower	Zero
Not Rated	Not Rated	Zero

Party B Independent Amount: \$-0-

Party B Rounding Amount: \$100,000

(d) Downgrade Event:

☐ Not Applicable
☒ Applicable

If applicable, complete the following:

☒ It shall be a Downgrade Event for Party B if **Party B and/or Party B's Guarantor's** Credit Rating falls below BBB- from S&P or below Baa3 from Moody's or if Party B's Guarantor ceases to be rated by both S&P and Moody's.

(e) Guarantor for Party B: Cargill, Incorporated

Guarantee Amount: As mutually agreed upon from time-to-time.

8.2 Party B Credit Protection:

(a) Financial Information:

☐ Option A
☐ Option B Specify: (parent name of Party A)
☒ Option C Specify: Carolina Power & Light d/b/a Progress Energy Carolinas, Inc. audited financials as soon as practicable after demand; provided, however, that the requesting party shall first use commercially reasonable efforts to obtain such information through publicly available means.

(b) Credit Assurances:

- ☐ Not Applicable
☒ Applicable

(c) Collateral Threshold:

- ☐ Not Applicable
☒ Applicable

If applicable, complete the following:

Party A Collateral Threshold: The lower of (i) the amount set forth below under the heading "Credit Limit" opposite the Credit Rating for Party A as of any valuation date, or (ii) zero if an Event of Default or a Potential Event of Default exists with respect to Party A has occurred and is continuing.

<u>S&P/Fitch</u>	<u>Moody's</u>	<u>Credit Limit (US Funds)</u>
AAA	Aaa	\$30,000,000
AA+	Aa1	\$30,000,000
AA	Aa2	\$30,000,000
AA-	Aa3	\$30,000,000
A+	A1	\$25,000,000
A	A2	\$25,000,000
A-	A3	\$25,000,000
BBB+	Baa1	\$20,000,000
BBB	Baa2	\$15,000,000
BBB-	Baa3	\$10,000,000
BB+ or below	Ba1 or lower	Zero
Not Rated	Not Rated	Zero

Party A Independent Amount: \$-0-

Party A Rounding Amount: \$100,000

(d) Downgrade Event:

- ☐ Not Applicable
☒ Applicable

If applicable, complete the following:

[X] It shall be a Downgrade Event for Party A if Party A's Credit Rating falls below BBB- from S&P or below Baa3 from Moody's or if Party A ceases to be rated by both S&P and Moody's.

(e) Guarantor for Party A: None

Guarantee Amount: Not applicable

Article Ten

Confidentiality

☒ Confidentiality Applicable

If not checked, inapplicable.

Schedule M

- ☐ Party A is a Governmental Entity or Public Power System
☐ Party B is a Governmental Entity or Public Power System
☐ Add Section 3.6. If not checked, inapplicable
☐ Add Section 8.6. If not checked, inapplicable

Other Changes

The Master Agreement is hereby amended and revised as follows:

This Master Power Purchase and Sale Agreement shall solely govern the sale and purchase between Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. and Cargill Power Markets, LLC as detailed in the Transaction Confirmation dated March 20, 2012. Upon completion of Parties' obligations pursuant to that Transaction, this Master Power Purchase and Sale Agreement shall terminate.

- 1.27 "Letter(s) of Credit" shall be deleted in its entirety and replaced with the following definition: "Letter of Credit" shall mean an irrevocable, non-transferable, standby letter of credit, issued by a major U.S. commercial bank or a L.Q.S. branch office of a major commercial foreign bank, with a credit rating of at least "A-" by S&P or "A3" by Moody's and having at least \$ 10,000,000,000 in total assets and capital surplus of at least 1,000,000,000. The form of the Letter of Credit and its issuer shall be reasonably acceptable to the party in whose favor the Letter of Credit is issued. Costs of a Letter of Credit shall be borne by the applicant for such Letter of Credit.
- 1.46 "Potential Event of Default" is amended by replacing the definition with the following: "Potential Event of Default" means any event which has occurred and is continuing and which would otherwise constitute an Event of Default after any required notice of such event had been provided and/or any applicable cure period for such event had expired.
- 1.50 "Recording" is amended by replacing the reference "Section 2.4" with Section 2.5." The following is added as a separate paragraph of Section 2.2
- 2.2 Party A and Party B confirm that this Master Agreement shall supersede and replace all prior agreements between the parties hereto with respect to the subject matter hereof. Party A and Party B confirm the terms of all Transactions, then outstanding and not fully performed as of the effective date of this Agreement are, as of the Effective Date, Transactions under and governed by this Master Agreement, and are a part of the single integrated agreement between the Parties consistent with the first paragraph of this Section 2.2.
- 2.4 Section 2.4 shall be amended to delete "either orally or" in line 7.
- 4.1 Seller Failure. After "The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount" add "and the origin of the values used in said calculation which must be derived from a commercially reasonable source."
- 4.2 Buyer Failure. After "The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount" add "and the origin of the values used in said calculation which must be derived from a commercially reasonable source."
- Add the following as Section 4.3:
- 4.3 Duty to Mitigate. Each Party agrees that it has a duty to mitigate damages and covenants that it will use commercially reasonable efforts to minimize any damages it may incur as a result of the other Party's performance or non-performance of the Agreement."
- 5.4 Section 5.4 shall be amended by adding the following language to the end of Section 5.4: "Notwithstanding any provision to the contrary contained in this Agreement but subject to the limitations set forth below in this paragraph, the Non-Defaulting Party shall not be required to pay to the Defaulting Party any amount under Article 5 until the Non-Defaulting Party receives confirmation satisfactory to it in its reasonable discretion (which may include an opinion of its counsel) that all other obligations of any kind whatsoever of the Defaulting Party to make any payments to the Non-Defaulting Party under this Agreement or otherwise have been fully and finally performed. Any such right by the Non-Defaulting Party to withhold payments pursuant to this provision shall expire 90 days after the effective date of the termination unless said Party has a good faith belief that it has not received all such payments owed to it by the Defaulting Party. The Non-Defaulting Party shall promptly provide the Defaulting Party with a written explanation for its determination. In each such case, the Non-Defaulting Party's right to withhold payment shall be extended for 30 days.
- 8.1 Sections 8.1(c) and 8.2(e) are hereby amended by deleting everything except the last two sentences and replacing the deleted portion with: "The rights and obligations of the parties with respect to Performance Assurance as collateral shall be governed by the Collateral Annex, which is attached hereto and incorporated herein by reference."

Sections 8.1(d) and 8.2(d) are each amended by inserting on the fifth line thereof between the phrase "of receipt of notice" and the phrase "then an Event of Default", the following phrase: "or fails to maintain such Performance Assurance or guaranty or other credit assurance for so long as the Downgrade Event is continuing".

Add the following as Section 9.3:

9.3 New Governmental Charges.

(a) "New Governmental Charges" means (i) any Governmental Charges enacted and effective after the Effective Date, including without limitation, that portion of any Governmental Charges or New Governmental Charges that constitutes an increase. (ii) any law, rule, order or regulation, or interpretation thereof, enacted and effective after the Effective Date resulting in the application of any Governmental Charges to a new or different class of Parties.

(b) Notwithstanding any other provision of this Agreement to the contrary, if (i) a New Governmental Charge is imposed for which Buyer or Seller would be responsible and (ii) the New Governmental Charge is of the type that Buyer can directly pass through to, or be reimbursed by, another person or entity, then Buyer shall pay or cause to be paid, or reimburse Seller if Seller has paid, all such New Governmental Charges and Buyer shall indemnify, defend and hold harmless Seller from any Claims for such New Governmental Charges.

(c) If Section 9.3(b)(ii) does not apply, the Parties agree to negotiate in good faith to determine each Party's respective share of such New Governmental Charge.

10.5 Assignment. Delete in its entirety Section 10.5 and insert and a new Section 10.5 the following:

"Assignment. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld or delayed; provided, however, either Party may, without the consent of the other Party, (1) transfer, sell, pledge, encumber or assign this Agreement or the accounts, revenues or proceeds hereof in connection with any financing or other financial arrangements, (ii) transfer or assign this Agreement to an Affiliate of such Party which Affiliate's creditworthiness is equal to or higher than that of such Party, or (iii) transfer or assign this Agreement to any person or entity succeeding to all or substantially all of the assets of such Party or pursuant to any consolidation or amalgamation with, or merger with or into another entity or the reorganization, incorporation, reincorporation or reconstitution into or as another entity; provided, however, that in each such case, any such assignee shall agree in writing to be bound by the terms and conditions hereof and so long as the transferring Party delivers such tax and enforceability assurance as the non-transferring Party may reasonably request. Any transfer or assignment of this Agreement made in compliance with Clause (i) or (iii) of the Section 10.5 shall constitute an acceptance and assumption of such obligations by the transferee, a novation of the transferee in place of the transferor with respect to such obligations (and any related interests so transferred), and a release and discharge by the non-transferring Party of the transferor from, and an agreement by the non-transferring Party not to make any claim for payment, liability, or otherwise against the transferor with respect to such obligations from and after the effective date of the transfer or assignment."

10.6 Governing Law is amended by removing "principles of conflicts of law." in line four and replacing it with "the application of such state's laws relating to conflicts of laws (except for General Obligations Laws 5-1401 and 5-1402)."

Add the following as a second paragraph to Section 10.9

10.9 "Notwithstanding any provision to the contrary contained herein, the Parties agree that in the event that either Party (the "Audited Party") is subject to a federal, state and/or local governmental or regulatory audit or review, then upon the written request of the Audited Party, the Audited Party shall be entitled to the same review and examination rights set forth in this Section 10.9. Such right set forth in this paragraph shall not be governed by the twelve (12) month limitation above, but shall be limited by any Statute of Limitations for such governmental or regulatory audit, or waivers thereof. Such rights shall not extend any time frame for the adjustment of any payments or invoices beyond the twelve (12) month period pursuant to Sections 6.3 and 10.9."

10.11 Confidentiality. Shall be amended by (a) inserting "Affiliates- between "employees" and "lenders" in the First sentence; and (b) following the last sentence replace the period with a semi-colon and add the following language:

"...; provided, all monetary damages shall be limited to actual direct damages and a breach of this section shall not give rise to a right to suspend or terminate any ongoing Transaction under this Agreement"; and (c) add as the last sentence "Notwithstanding the foregoing, nothing herein shall

prevent either Party from disclosing simple price and volume terms to a third party solely for the purposes of it being used in conjunction with other similar information for establishing electric price indices by a qualified independent entity provided that such information is only published in aggregate form with other data such that it cannot be used to identify the parties to a Transaction."

Add the following provision as new Section 10.12:

10.12 Mobile-Siena Doctrine. Absent the agreement of all Parties to the proposed change, the standard of review for changes to any rate, charge, classification, term or condition of this Agreement, whether proposed by a Party (to the extent that any waiver in subsection (h) below is unenforceable or ineffective as to such Party), a non-party or FERC acting *sua sponte*, shall be the "public interest" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 351 U.S. 348 (1956) (the "Mobile-Sierra doctrine").

10.13 Add the following provision as a new Section 10.13:

"Any original executed Master Power Purchase & Sale Agreement, Confirmation Letter, or other related document may be photocopied and stored on computer tapes and disks (the "Imaged Agreement"). The Imaged Agreement, if introduced as evidence on paper, a tape or other electronic recording of an oral transaction (the "Transaction Tape"), if introduced as evidence in its original form and as transcribed onto paper, and all computer records of the foregoing, if introduced as evidence in printed format, in any judicial, arbitration, mediation or administrative proceedings, will be admissible as between the Parties to the same extent and under the same conditions as other business records originated and maintained in documentary form. Neither Party shall object to the admissibility of the Transaction Tape or the Imaged Agreement (or photocopies of the transcription of the Transaction Tape or the Imaged Agreement) on the basis that such were not originated or maintained in documentary form under either the hearsay rule, the best evidence rule or other rule of evidence."

Additional Provisions:

The following provisions shall be added to Schedule P: Products and Related Definitions:

Index Transactions.

Market Disruption. If a Market Disruption Event occurs during a Determination Period, the Floating Price for the affected Trading Day(s) shall be determined by reference to the Floating Price specified in the Transaction for the first Trading Day thereafter on which no Market Disruption Event exists; provided, however, if the Floating Price is not so determined within three (3) Business Days after the first Trading Day on which the Market Disruption Event occurred or existed, then the Parties shall negotiate in good faith to agree on a Floating Price (or a method for determining a Floating Price), and if the Parties have not so agreed on or before the twelfth Business Day following the first Trading Day on which the Market Disruption Event occurred or existed, then the floating Price shall be determined in good faith by each party obtaining in good faith a quotation from two (2) leading dealers of the highest credit standing which satisfy all the criteria that the Seller applies generally at the time in deciding to offer or make an extension of credit, other than one of the parties of an Affiliate of one of the parties, and the alternate floating Price tier the affected period shall be the arithmetic mean of such quotations, without regard to the highest and lowest values.

"Determination Period" means each calendar month a part or all of which is within the Delivery Period of a Transaction.

"Exchange" means, in respect of a Transaction, the exchange or principal trading market specified in the relevant Transaction.

"Floating Price" means a Contract Price specified in a Transaction that is based upon a Price Source.

"Market Disruption Event" means, with respect to any Price Source, any of the following events: (a) the failure of the Price Source to announce or publish the specified Floating Price or information necessary for determining the Floating Price; (b) the failure of trading to commence or the permanent discontinuation or material suspension of trading in the relevant options contract or commodity on the Exchange or in the market specified for determining a Floating Price; (c) the temporary or permanent discontinuance or unavailability of the Price Source; (d) the temporary or permanent closing of any Exchange specified for determining a Floating Price; or (e) a material change in the formula for or the method of determining the Floating Price.

"Price Source" means, in respect of a Transaction, the publication (or such other origin of reference, including an Exchange) containing (or reporting) the specified price (or prices from which the specified price is calculated) specified in the relevant Transaction.

"Trading Day" means a day in respect of which the relevant Price Source published the Floating Price.

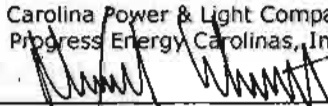
Corrections to Published Prices. For purposes of determining a Floating Price for any day, if the price published or announced on a given day and used or to be used to determine a relevant price is subsequently corrected and the correction is published or announced by the person responsible for that publication or announcement, either Party may notify the other Party of (i) that correction and (ii) the amount (if any) that is payable as a result of that correction. If, not later than thirty (30) days after publication or announcement of that correction, a Party gives notice that an amount is so payable, the Party that originally either received or retained such amount will, not later than three (3) Business Days after the effectiveness of that notice, pay, subject to any applicable conditions precedent, to the other Party that amount, together with interest at the Interest Rate for the period from and including the day on which payment originally was (or was not) made to but excluding the day of payment of the refund or payment resulting from that correction.

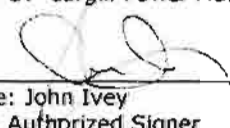
Calculation of Floating Price. For the purposes of the calculation of a Floating Price, all numbers shall be rounded to three (3) decimal places. If the fourth (01) decimal number is five (5) or greater, then the third (3rd) decimal number shall be increased by one (1), and if the fourth (4th) decimal number is less than five (5), then the third (3rd) decimal number shall remain unchanged.

IN WITNESS WHEREOF, the Parties have caused this Master Agreement to be duly executed as of the date first above written.

Party A: Carolina Power & Light Company d/b/a
Progress Energy Carolinas, Inc.

Party B: Cargill Power Markets, LLC

By: 
Name: _____
Title: **Alexander (Sasha) Weintraub**

By: 
Name: John Ivey
Title: Authorized Signer

Vice President - Fuels and Power Optimization

DISCLAIMER: This Master Power Purchase and Sale Agreement was prepared by a committee of representatives of Edison Electric Institute ("EEI") and National Energy Marketers Association ("NEM") member companies to facilitate orderly trading in and development of wholesale power markets. Neither EEI nor NEM nor any member company nor any of their agents, representatives or attorneys shall be responsible for its use, or any damages resulting therefrom. By providing this Agreement EEI and NEM do not offer legal advice and all users are urged to consult their own legal counsel to ensure that their legal interests are adequately protected.

PEC-Morgan Stanley PSA

**MASTER POWER PURCHASE AND SALE AGREEMENT
CONFIRMATION LETTER**

This is a confirmation (the "Confirmation") dated March 21, 2012, between Progress Energy Carolinas, Inc. ("PEC") and Morgan Stanley Capital Group, Inc. ("Buyer") (individually a "Party" and collectively the "Parties"). The Parties agree as follows:

COMMERCIAL TERMS

- General:** PEC will sell and deliver, and Buyer will purchase and receive, the Quantity of Capacity and Energy every hour during the Delivery Period.
- Product:** Capacity and Firm (LD) Energy, as defined in Schedule P of the EEI Master Agreement. PEC will not use the Capacity sold hereunder to meet its planning or operational reserve requirements. The Energy will be delivered from PEC's generating resources.
- Quantity:** 125 MW On-Peak (Monday to Friday 0700-2300 EPT),
300 MW Off-Peak (Monday to Sunday 2300-0700 EPT and Saturday and Sunday 0700-2300 EPT)
- Term:** Begins the first day after the date of the closing of the Merger, but not earlier than June 1, 2012 and not later than August 1, 2012 and ends August 31, 2014. Within five Business Days after all regulatory approvals required for the closing of the Merger have been obtained, PEC will give notice to Buyer of the closing date of the Merger. The "Merger" means the merger between Progress Energy, Inc and Duke Energy Corporation which has been conditionally approved by the Federal Energy Regulatory Commission ("FERC") in FERC docket EC11-60.

Execution Copy

Delivery Period:	<p>(a) The period beginning at 0000 EPT on the first day after the date of the closing of the Merger, but not earlier than June 1, 2012 and not later than August 1, 2012, and ending at 2400 EPT on August 31, 2012; and</p> <p>(b) the period beginning at 0000 EPT on the first day of June 1, 2013 and ending at 2400 EPT on August 31, 2013; and</p> <p>(c) the period beginning at 0000 EPT on the first day of June 1, 2014 and ending at 2400 EPT on August 31, 2014.</p>
Payment:	Buyer shall pay to PEC the Monthly Capacity Price for the entire Delivery Period and shall pay to PEC the Energy Price for all Energy delivered hereunder.
Monthly Capacity Price:	<p>On-Peak : (\$0.34)/kw-month (fixed)</p> <p>Off-Peak : (\$1.27)/kw-month (fixed)</p> <p>For the avoidance of doubt, amounts in parentheses shall be paid by PEC to Buyer. If the first day of the Term falls on any day other than the first day of a calendar month, the Monthly Capacity Payment for that month shall be prorated on a daily basis.</p>
Energy Price:	<p>On-Peak: the product of the On-Peak Heat Rate times the Gas Index</p> <p>Off-Peak: the product of the Off-Peak Heat Rate times the Gas Index</p>
Gas Index:	Daily Index price for natural gas in MMBtu, as reported in the Platts Publication Gas Daily, under the heading Transco Zone 5
Heat Rates:	<p>On-Peak: 10.0 MMBtu/MWh</p> <p>Off-Peak: 7.0 MMBtu/MWh</p>
Delivery Point:	CPL system busbar
Transmission:	Buyer shall obtain transmission service and any Ancillary Services required for transmission of the Energy from the Delivery Point.

Execution Copy

Energy Scheduling:

Buyer shall purchase and schedule the full Quantity of Energy during all hours of the Delivery Period unless excused under the terms of this Agreement. Prior to 0930 EPT of the day prior to the day of delivery of the Energy, Buyer will request transmission service sufficient to transmit the full Quantity of Energy from the Delivery Point to the ultimate sink. To the extent the ultimate sink is the PJM Interconnection and Buyer has requested and been denied PJM Spot In (or equivalent no reservation fee import service), Buyer shall request non-firm point to point import transmission service. By no later than 0930 EPT of the day prior to the day of delivery of the Energy, Buyer will provide written notice (the "0930 Notice") to PEC stating the quantity of Energy of which Buyer will take delivery and the transmission path from the Delivery Point to the ultimate sink for which Buyer obtained or attempted to obtain transmission service.

If the 0930 Notice states that Buyer will not take delivery of the full Quantity, then Buyer shall state the reason. If the 0930 Notice states that Buyer will not take delivery of the full Quantity of Energy because Buyer was unable to obtain transmission service sufficient to transmit the full Quantity from the Delivery Point to the ultimate sink, then, by no later than 1530 EPT, Buyer shall provide another written notice (the "1530 Notice") to PEC stating the additional quantity of Energy (up to the full Quantity of Energy) for which Buyer has obtained transmission service on the same path as the 0930 Notice and of which Buyer will take delivery. If the 0930 Notice and 1530 Notice, if any, state that Buyer will not take delivery of the full Quantity of Energy, then PEC shall be excused from its obligation to deliver the quantity of Energy. For the avoidance of doubt, Buyer's failure to submit requests for sufficient transmission service (firm, Spot In, and/or non-firm) or to give notice to PEC in accordance with the deadlines set forth in this provision will constitute an unexcused failure to receive; otherwise Buyer's performance will be excused.

OTHER PROVISIONS

Execution Copy

1. Conditions Precedent

(a) It is a condition precedent to the Parties' obligations hereunder that the closing of the Merger occurs by July 31, 2012.

(b) It is a condition precedent to the Parties' obligations hereunder that this Confirmation is accepted by FERC by July 31, 2012 as a PEC rate schedule under the Federal Power Act without modification, suspension, investigation or other condition (including setting this Confirmation, or part thereof, for hearing) unacceptable to PEC. PEC will give notice to the Buyer within two Business Days after this condition has been satisfied.

2. EEI Master Agreement

(a) The transaction described in this Confirmation constitutes a Transaction entered into under and subject to the EEI Master Power Purchase and Sale Agreement between the Parties dated March 19, 2012, as amended as follows (the "EEI Master Agreement").

(b) As applied to this Confirmation only, Section 1.23 of the EEI Master Agreement is hereby amended so that it reads in its entirety as follows: "Force Majeure" means an event or circumstance which prevents one Party from performing its obligations under one or more Transactions, which event or circumstance was not anticipated as of the date the Transaction was agreed to, which is not within the reasonable control of, or the result of the negligence of, the Claiming Party, and which, by the exercise of due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided. Force Majeure shall not be based on (i) the loss of Buyer's markets; (ii) Buyer's inability economically to use or resell the Product purchased hereunder; (iii) the loss or failure of Seller's supply; or (iv) Seller's ability to sell the Product at a price greater than the Contract Price. Notwithstanding the foregoing, it shall be a Force Majeure, the performance of Buyer shall be excused, and no damages shall be payable, including any amounts determined pursuant to Article Four, if the transmission is unavailable or interrupted or curtailed for any reason, at anytime, anywhere from the Delivery Point to the Buyer's proposed ultimate sink, regardless of whether transmission, if any, that Buyer is attempting to secure and/or has purchased for the Product is firm or non-firm. If the transmission (whether firm or non-firm) that Buyer is attempting to secure is unavailable, this contingency excuses performance by the Buyer for the duration of the unavailability. If the transmission (whether firm or non-firm) that Buyer has secured from the Delivery Point to the sink is interrupted or curtailed for any reason, this contingency excuses performance by the Buyer for the duration of the interruption or curtailment. The applicability of Force Majeure to the Transaction is governed by the terms of the Product and Related Definitions contained in Schedule P.

(c) For the avoidance of doubt, the obligation of PEC to make any Monthly Capacity Payment shall not be affected by an event of Force Majeure where the performance of Buyer is excused due to transmission being unavailable, interrupted, or curtailed.

(d) As applied to this Confirmation only, Section 1.53 of the EEI Master Agreement is hereby amended so that it reads in its entirety as follows: "'Sales Price' equals zero under all circumstances."

Execution Copy

3. Entire Agreement

This Confirmation (along with the EEI Master Agreement) constitutes the entire and integrated agreement between the Parties relating to the rates, terms, and conditions set out in this Confirmation. This Confirmation supersedes all prior agreements whether oral or written related to the subject matter of this Confirmation.

The Parties have executed this Confirmation through their duly authorized representatives on the dates set forth below.

PROGRESS ENERGY CAROLINAS, INC.

**MORGAN STANLEY CAPITAL GROUP
INC.**

By: 

By: 

Name:

~~Alexander (Sasha) Weintraub~~

Name: Deborah L. Hart

Title:

~~Vice President - Fuels and Power Optimization~~

Title: Vice President

Date:

~~March 22 2012~~

Date: March 21, 2012

With additional Notices of an Event of Default or
Potential Event of Default to:
Attn: Carolina Power & Light Company d/b/a
Progress Energy, Carolinas, Inc.
Attn: Vice President-Fuels and Power Optimization
Phone: 919-546-6299
Facsimile: 919-546-4640

With additional Notices of an Event of Default or
Potential Event of Default to:
Attn: Morgan Stanley Capital Group Inc.
1585 Broadway
New York, NY 10036-8293
Attention: Close-out Notices
Phone: N/A
Facsimile: 212-507-4622

The Parties hereby agree that the General Terms and Conditions are incorporated herein, and to the following provisions as provided for in the General Terms and Conditions:

Party A Tariff:
Tariff:

Dated:

Docket #:

Party B Tariff:
Tariff: FERC

Dated: 6/21/1994

Docket #: ER94-1384-000

Article Two

Transaction Terms and Conditions

☒ Optional provision in Section 2.4. If not checked, inapplicable.

Article Four

Remedies for Failure
to Deliver or Receive

☒ Accelerated Payment of Damages. If not checked, inapplicable.

Article Five

Events of Default; Remedies

☒ Cross Default for Party A:

☒ Party A: Single or multiple
event(s) equal to or greater than
the Cross Default Amount

Cross Default Amount:
\$35,000,000

☐ Other Entity:
(parent name of Party A)

Cross Default Amount:
\$35,000,000

☒ Cross Default for Party B:

☐ Party B: Single or multiple
event(s) equal to or greater than
the Cross Default Amount

Cross Default Amount:

☒ Other Entity: Morgan Stanley

Cross Default Amount:
\$35,000,000

5.6 Closeout Setoff

- ☒ Option A (Applicable if no other selection is made.)
☐ Option B - Affiliates shall have the meaning set forth in the
Agreement
☐ Option C (No Setoff)

Article Eight

Credit and Collateral Requirements

8.1 Party A Credit Protection:

(a) Financial Information:

- ☐ Option A
☐ Option B Specify:
☒ Option C Specify: Financial statements for Morgan
Stanley; provided, however that the requesting party shall
first use commercially reasonable efforts to obtain such
information through publicly available means.

(b) Credit Assurances:

- ☒ Not Applicable
☐ Applicable

(c) Collateral Threshold: (As set forth in the Collateral Annex attached hereto)

- ☐ Not Applicable
☒ Applicable

(d) Downgrade Event:

- ☐ Not Applicable
☒ Applicable

If applicable, complete the following:

[X] It shall be a Downgrade Event for Party B if Party B and/or Party B's Guarantor's Credit Rating falls below BBB- from S&P or below Baa3 from Moody's or if Party B's Guarantor ceases to be rated by both S&P and Moody's.

(e) Guarantor for Party B: Morgan Stanley_.

Guarantee Amount: \$Unlimited

8.2 Party B Credit Protection:

(a) Financial Information:

- ☐ Option A
☐ Option B Specify: (parent name of Party A)
☒ Option C Specify: Carolina Power & Light d/b/a Progress Energy Carolinas, Inc. audited financials as soon as practicable after demand; provided, however, that the requesting party shall first use commercially reasonable efforts to obtain such information through publicly available means.

(b) Credit Assurances:

- ☒ Not Applicable
☐ Applicable

(c) Collateral Threshold: (As set forth in the Collateral Annex attached hereto)

- ☐ Not Applicable
☒ Applicable

(d) Downgrade Event:

- ☐ Not Applicable
☒ Applicable

If applicable, complete the following:

[X] It shall be a Downgrade Event for Party A if Party A's Credit Rating falls below BBB- from S&P or below Baa3 from Moody's or if Party A ceases to be rated by both S&P and Moody's.

(e) Guarantor for Party A: None

Guarantee Amount: Not applicable

Article Ten

Confidentiality ☒ Confidentiality Applicable If not checked, inapplicable.

Schedule M

- ☐ Party A is a Governmental Entity or Public Power System
☐ Party B is a Governmental Entity or Public Power System
☐ Add Section 3.6. If not checked, inapplicable
☐ Add Section 8.6. If not checked, inapplicable

Other Changes

The Master Agreement is hereby amended and revised as follows:

I. Modifications to General Terms and Conditions.

A. General Definitions.

1. Section 1.1 is amended by inserting at the end thereof the following:
 "; provided, however, that in the case of MSCGI, the term "Affiliate" shall not include Morgan Stanley Derivative Products Inc."
2. Section 1.12 is amended by replacing the word "issues" in the fourth line with the word "issuer."
3. Section 1.50 is amended to read as follows: "2.4" shall be deleted and replaced with "2.5".
4. Section 1.51 is amended by (a) inserting the phrase "for delivery" in the second line after the word "purchases" and before the phrase "at the Delivery Point", and (b) deleting the phrase "at Buyer's option" in the fifth line and inserting in their place the following: "absent a purchase" and (c) adding at the end thereof the following sentence, "Buyer shall have no obligation to enter into actual replacement transactions in order to determine market price."
5. Section 1.53 is amended by (a) deleting the phrase "at the Delivery Point" in the second line, and (b) deleting the phrase "at Seller's option" in the fifth line and inserting in their place the following: "absent a sale, assuming a sale could have been made in a commercially reasonable manner."

B. Transaction Terms and Conditions.

1. Section 2.5 is amended by inserting the phrase ", provided that such Recording would be admissible in accordance with the applicable law of such proceeding or action" at the end of the first sentence.

C. Obligations and Deliveries.

1. The following new section is inserted at the end of Article Three:
 Section 3.4. Agreement to Deliver Documents: Party A and Party 13 will deliver, upon execution of this Agreement and as deemed necessary for further documentation: (a) either (1) a signature booklet containing secretary's certificate and resolutions ("authorizing resolutions") authorizing the Party to enter into transactions of the type contemplated by the parties or (2) a secretary's certificate, authorizing resolutions and incumbency certificate for such party and any Guarantor of such Party reasonably satisfactory in form and substance to the other Party; and (b) certified copies of documents evidencing each Party's capacity to execute this Agreement, and any Guarantee (if applicable) and to perform its obligations hereunder and thereunder.

D. Remedies for Failure to Deliver/Receive.

1. Section 4.1 is hereby amended as follows: after "The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount" add "and the origin of the values used in said calculation which must be derived from a commercially reasonable source."
2. Section 4.2 is hereby amended as follows: after "The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount" add "and the origin of the values used in said calculation which must be derived from a commercially reasonable source."
3. Add the following as Section 4.3:

"4.3 Duty to Mitigate. Each Party agrees that it has a duty to mitigate damages and covenants that it will use commercially reasonable efforts to minimize any damages it may incur as a result of the other Party's performance or non-performance of the Agreement."

E. Events of Default; Remedies.

1. Section 5.1(a) is amended by deleting the phrase "three (3)" and inserting in their place the phrase "two (2)" in the second line thereof.
2. Section 5.1(h)(ii) is amended by deleting the phrase "and such failure shall not be remedied within three (3) Business Days after written notice" in the third and fourth line thereof.
3. Section 5.2 is amended by deleting the phrase ", as soon thereafter as is reasonably practicable" in the last two lines thereof, and by inserting in its place the following: "then each such Transaction (each, an "Excluded Transaction") shall be terminated as soon thereafter as reasonably practicable, and upon termination shall be deemed to be a Terminated Transaction and the Termination Payment payable in connection with all such Transactions shall be calculated in accordance with Section 5.3 below. The Gains and Losses for each Terminated Transaction shall be determined by calculating the amount that would be incurred or realized to replace or to provide the economic equivalent of the remaining payments or deliveries in respect of that Terminated Transaction. The Non-Defaulting Party may determine its Gains and Losses by reference to information either available to it internally or supplied by one or more third parties including, without limitation, quotations of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets. Third parties supplying such information may include, without limitations, dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information."
4. Section 5.3 is amended by inserting the phrase "plus, at the option of the Non- Defaulting Party, any cash or other form of security then available to the Defaulting Party pursuant to Article Eight," between the words "that are due to the Non- Defaulting Party," and "plus any and all other amounts" in the sixth line thereof.
5. Section 5.4 is amended by inserting before the first line thereof the following new sentence: "A Party shall determine the Settlement Amount for each Terminated Transaction as of the relevant Early Termination Date, or if that is not reasonably practicable, as of the earliest date thereafter as is reasonably practicable."
6. Section 5.4 is amended by inserting at the end thereof the following: "Notwithstanding anything to the contrary in this Agreement, the Non-Defaulting Party need not pay to the Defaulting Party any amount under Article Five until all other obligations of any kind whatsoever of the Defaulting Party to make any payments to the Non-Defaulting Party under this Agreement or otherwise which are due and payable as of the Early Termination Date (including any amounts payable pursuant to each Excluded Transaction) have been fully and finally performed."

F. Credit and Collateral Requirements.

1. The three (3) Business Day period in each of Sections 8.1(b), 8.1(d), 8.2(b) and 8.2(d) is reduced to one (1) Business Day.
2. Sections 8.1(c) and 8.2(c) are deleted in their entirety and, in the event that Collateral Threshold is indicated as being applicable for either or both of Party A Credit Protection and Party 13 Credit Protection, the rights and obligations of the parties with respect to Performance Assurance as collateral shall be governed by the Collateral Annex, which is attached hereto and incorporated herein by reference.
3. Section 8.1(d) and 8.2(d) are each amended by inserting on the fifth line thereof between the phrase "of receipt of notice" and the phrase ", then an Event of Default", the following phrase: "or fails to maintain such Performance Assurance or guaranty or other credit assurance for so long as the Downgrade Event is continuing"

G. Miscellaneous.

1. Section 10.2(viii) is hereby amended by adding at the end thereof: "; it is understood that information and explanations of the terms and conditions of each such Transaction shall not be considered investment or trading advice or a recommendation to enter into that Transaction; and the other Party is not acting with respect to any communication (written or oral) as a "municipal advisor," as such term is defined in Section 975 of the U.S. Dodd-Frank Wall Street Reform & Consumer Protection Act; no communication (written or oral) received from the other party shall be deemed to be an assurance or guarantee as to the expected results of that Transaction; and the other party is not acting as a fiduciary for or an adviser to it in respect of that Transaction;"
2. Section 10.2 is hereby amended by adding the following new subsections at the end thereof:
 "(xiii) it is eligible to file as a debtor under Chapter 7 and/or Chapter 11 of the United States Bankruptcy Code; and,

(xiv) Each Party is an "Eligible Contract Participant" as defined in Section 1a(12) of the Commodity Exchange Act, as amended, 7 U.S.C. § 1a(12); and

Each Party represents, for the purposes of this Master Agreement, that it is not (i) an employee benefit plan (hereinafter an "ERISA Plan"), as defined in Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), subject to Title I of ERISA or a plan subject to Section 4975 of the Internal Revenue Code of 1986, as amended, or subject to any other statute, regulation, procedure or restriction that is materially similar to Section 406 of ERISA or Section 4975 of the Code (together with ERISA Plans, "Plans"), (ii) a person any of the assets of whom constitute assets of a Plan, or (iii) in connection with any Transaction under this Agreement, a person acting on behalf of a Plan, or using the assets of a Plan.

3. Section 10.6 is amended by inserting at the end thereof the following new sentence: "With respect to any proceeding in connection with any claim, counterclaim, demand, cause of action, dispute and controversy arising out of or relating to this Master Agreement, the parties hereby consent to the exclusive jurisdiction of the federal and state courts sitting in the borough of Manhattan in New York State."
4. Section 10.7 is amended by deleting from the sixth line the phrase "at the close of business".
5. Section 10.9 is amended by inserting the phrase "copies of in the second line between the phrase "to examine" and the phrase "the records".
6. Section 10.11 is amended by:
 - inserting in the third line thereof the phrase "or the completed Cover Sheet to, or any annex to, this Master Agreement" between the phrase "this Master Agreement" and the phrase "to a third party";
 - inserting the phrase "or the Party's Affiliates" between the phrase "(other than the Party's" at the end of the third line thereof and the phrase "employees, lenders, counsel" at the beginning of the fourth line thereof;
 - deleting the phrase "have agreed to" in the fifth line, and inserting in its place the phrase "who the Party is satisfied will";
 - inserting the phrase "or request by a regulatory authority" in the seventh line between the phrase "court or regulatory proceeding" and the phrase "; provided, however, each Party shall,";

The following new sections are inserted at the end of Article Ten:

Section 10.12. Binding Rates and Terms.

Mobile-Sierra Doctrine. Absent the agreement of all Parties to the proposed change, the standard of review for changes to any section of this Master Agreement (including all Transactions and/or Confirmations) specifying the rate(s) or other material economic terms and conditions agreed to by the Parties herein, whether proposed by a Party, a nonparty or the Federal Energy Regulatory Commission acting sua sponte, shall be the "public interest" standard of review set forth in United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956) and Federal Power Commission v. Sierra Pacific Power Co., 350 U.S. 348 (1956) and clarified by Morgan Stanley Capital Group Inc. v. Pub. Util. Dist. No. 1 of Snohomish County, 128 S. Ct. 2733 (2008) (the "Mobile-Sierra" doctrine)."

In addition, and notwithstanding the foregoing subsection (a), to the fullest extent permitted by applicable law, each Party, for itself and its successors and assigns, hereby expressly and irrevocably waives any rights it can or may have, now or in the future, whether under §§ 205 and/or 206 of the Federal Power Act or otherwise, to seek to obtain from FERC by any means, directly or indirectly (through complaint, investigation or otherwise), and each hereby covenants and agrees not at any time to seek to so obtain, an order from FERC changing any section of this Agreement specifying the rate, charge, classification, or other term or condition agreed to by the parties, it being the express intent of the parties that, to the fullest extent permitted by applicable law, neither Party shall unilaterally seek to obtain from FERC any relief changing the rate, charge, classification, or other term or condition of this Agreement, notwithstanding any subsequent changes in applicable law or market conditions that may occur. In the event it were to be determined that applicable law precludes the parties from waiving their rights to seek changes from FERC to their market-based power sales contracts (including entering into covenants not to do so) then this subsection (b) shall not apply, provided that, consistent with the foregoing subsection (a), neither Party shall seek any such changes except solely under the "public interest" application of the "just and reasonable" standard of review and otherwise as set forth in the foregoing section (a).

Section 10.13 Index Transactions

"Market Disruption". If a Market Disruption Event occurs during a Determination Period, the Floating Price for the affected Trading Day(s) shall be determined by reference to the Floating Price specified in the Transaction for the first Trading Day thereafter on which no Market Disruption Event exists; *provided, however*, if the Floating Price is not so determined within three (3) Business Days after the first Trading Day on which the Market Disruption Event occurred or existed, then the Parties shall negotiate in good faith to agree on a Floating Price (or a method for determining a Floating Price); and if the Parties have not so agreed on or before the third (3rd) Business Day following the first Trading Day on which the Market Disruption Event occurred or existed, then the Floating Price shall be determined using the Dealer

Fallback; and if Dealer Fallback did not produce the Floating Price value, the Parties shall use No-Fault Termination.

"Dealer Fallback" means that:

- (a) promptly upon becoming aware of the Market Disruption Event, the Parties shall expeditiously and jointly agree upon four (4) independent leading dealers, which can consist of electronic exchanges, brokers and competitors ("Reference Dealers") in the relevant trading market for the relevant underlying commodity market selected in good faith: (A) from among Reference Dealers of the highest credit standing which satisfy all the criteria that the Parties apply generally at the time in deciding whether to offer or to make an extension of credit or to enter into a transaction comparable to the Transaction that is affected by the Market Disruption Event;
- (b) such Reference Dealers shall be appointed to make a determination of the Floating Price taking into consideration the latest available Price Source quotation for the Floating Price and any other information that in good faith they deem relevant;
- (c) if four (4) bona fide quotations are provided by Reference Dealers as requested, the Floating Price for that Trading Day will be the arithmetic mean of the Floating Prices provided by each Reference Dealer without regard to the Floating Prices having the highest and lowest values, in which case such calculations shall be binding and conclusive absent manifest error;
- (d) if only three (3) bona fide quotations are provided as requested, the Floating Price for the relevant Trading Day will be Floating Price provided by Reference Dealer that remains after disregarding the Floating Prices having the highest and lowest values;
- (e) for this purpose, if more than one (1) quotation has the same highest value or lowest value, then the Floating Price of one (1) of such quotations shall be disregarded;
- (f) if fewer than three quotations are provided, and if the parties have not agreed upon the appointment of the Reference Dealers on or before the fifth (5) Business Day following the first Trading Day on which the Market Disruption Event occurred or existed, it will be deemed that the price for that Trading Day cannot be determined.

"Determination Period" means each calendar month a part or all of which is within the Delivery Period of a Transaction.

"Exchange" means, in respect of a Transaction, the exchange or principal trading market specified in the relevant Transaction.

"Floating Price" means a Contract Price specified in a Transaction that is based upon a Price Source.

"Market Disruption Event" means, with respect to any Price Source, any of the following events:

- (a) the failure of the Price Source to announce or publish the specified Floating Price or information necessary for determining the Floating Price;
- (b) the failure of trading to commence or the permanent discontinuation or material suspension of trading in the relevant options contract or commodity on the Exchange or in the market specified for determining a Floating Price;
- (c) the temporary or permanent discontinuance or unavailability of the Price Source;
- (d) the temporary or permanent closing of any Exchange specified for determining a Floating Price;
- (e) a material change in the formula for or the method of determining the Floating Price; or
- (f) Tax Disruption Event.

"Price Source" means, in respect of a Transaction, the publication (or such other origin of reference, including an Exchange) containing (or reporting) the specified price (or prices from which the specified price is calculated) specified in the relevant Transaction.

"Trading Day" means a day in respect of which the relevant Price Source published the Floating Price.

"Tax Disruption Event" means the imposition of, change in or removal of an excise, severance, sales, use, value-added, transfer, stamp, documentary, recording or similar tax on, or measured by reference to, the relevant Product (other than tax on, or measured by reference to overall gross or net income) by any government or taxation authority after the Trading Day, if the direct effect of such imposition, change or removal is to raise or lower the Floating Price on the relevant Trading Day that would otherwise be the date of pricing from what it would have been without that imposition, change or removal.

"No-Fault Termination" means that the Transaction will be terminated in accordance with any applicable provisions set forth in the relevant agreement or Confirmation as if an Early Termination Date (as defined in the relevant Confirmation) had occurred on the day No-Fault Termination became the applicable Disruption Fallback, and each Party will determine its Losses (which amount shall also include its Costs) in respect to this Agreement (or, if fewer than all Transactions are being terminated, in respect to all terminated Transactions) and an amount will be payable equal to one-half of the difference between such Losses of the Party with the higher Losses ("X") and such Losses of the party with the lower Losses ("Y"). If the amount payable is a positive number, Y will pay it to X; if it is a negative number, X will pay the absolute value of that amount to Y.

Corrections to Published Prices. For purposes of determining a Floating Price for any day, if the price published or announced on a given day and used or to be used to determine a relevant price is subsequently corrected and the correction is published or announced by the person responsible for that publication or announcement within thirty (30) days of the original publication or announcement, either Party may notify the other Party of (i) that correction and (ii) the amount (if any) that is payable as a result of that correction. If, not later than thirty (30) days after publication or announcement of that correction, a Party gives notice that an amount is so payable, the Party that originally either received or retained such amount will, not later than three (3) Business Days after the effectiveness of that notice, pay, subject to any applicable conditions precedent, to the other Party that amount, together with interest at the Interest Rate for the period from and including the day on which payment originally was (or was not) made to but excluding the day of payment of the refund or payment resulting from that correction.

Calculation of Floating Price. For the purposes of the calculation of a Floating Price, all numbers shall be rounded to three (3) decimal places. If the fourth (4th) decimal number is five (5) or greater, then the third (3rd) decimal number shall be increased by one (1), and if the fourth (4th) decimal number is less than five (5), then the third (3rd) decimal number shall remain unchanged."

IN WITNESS WHEREOF, the Parties have caused this Master Agreement to be duly executed as of the date first above written.

Party A: Carolina Power & Light Company d/b/a
Progress Energy Carolinas, Inc.

Party B: Morgan Stanley Capital Group Inc.

By: 

By: 

Name: **Alexander (Sasha) Weintraub**
Vice President - Fuels and Power Optimization

Name: Deborah L. Hart

Title: _____

Title: Vice President

DISCLAIMER: This Master Power Purchase and Sale Agreement was prepared by a committee of representatives of Edison Electric Institute ("EEI") and National Energy Marketers Association ("NEM") member companies to facilitate orderly trading in and development of wholesale power markets. Neither EEI nor NEM nor any member company nor any of their agents, representatives or attorneys shall be responsible for its use, or any damages resulting therefrom. By providing this Agreement EEI and NEM do not offer legal advice and all users are urged to consult their own legal counsel to ensure that their legal interests are adequately protected.



**EDISON ELECTRIC
INSTITUTE**

Collateral Annex

Version 1.0

2/21/02

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COLLATERAL ANNEX

This Collateral Annex, together with the Paragraph 10 Elections, (the "Collateral Annex") supplements, forms a part of, and is subject to, the EEI Master Power Purchase and Sale Agreement, dated **March 20, 2012**, including the Cover Sheet and any other annexes thereto between Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. ("Party A") and Morgan Stanley Capital Group Inc. ("Party B"). Capitalized terms used in this Collateral Annex but not defined herein shall have the meanings given such terms in the Agreement.

The obligations of each Party under the Agreement shall be secured in accordance with the provisions of this Collateral Annex, which, except as provided below, sets forth the exclusive conditions under which a Party will be required to Transfer Performance Assurance in the form of Cash, a Letter of Credit or other property as agreed to by the Parties, as well as the exclusive conditions under which a Party will release such Performance Assurance. This Collateral Annex supercedes and replaces in its entirety Sections 8.1(c), 8.2(c) and 8.3 of the Agreement and the defined terms used therein to the extent that such terms are otherwise defined and used in this Collateral Annex. In addition, to the extent that the Parties have specified on the Cover Sheet that Sections 8.1(b), 8.1(d), 8.2(b) or 8.2(d) of the Agreement are applicable, then the definition of Performance Assurance as used in this Collateral Annex shall apply and Paragraphs 2, 6, 7 and 9 of this Collateral Annex shall apply to any such Performance Assurance posted under such provisions, it being understood that nothing contained in this Collateral Annex shall change any election that the Parties have specified on the Cover Sheet with respect to Sections 8.1(b), 8.1(d), 8.2(b) or 8.2(d) of the Agreement, which provisions require a Party to Transfer Performance Assurance under certain circumstances not contemplated by this Collateral Annex.

Paragraph 1. Definitions.

For purposes of this Collateral Annex, the following terms have the respective definitions set forth below:

"Calculation Date" means any Local Business Day on which a Party chooses or is requested by the other Party to make the determinations referred to in Paragraphs 3, 4, 5 or 8 of this Collateral Annex.

"Cash" means U.S. dollars held by or on behalf of a Party as Performance Assurance hereunder.

"Collateral Account" shall have the meaning attributed to it in Paragraph 6(a)(ii)(B).

"Paragraph 10 Cover Sheet" means the Cover Sheet attached to this Collateral Annex setting forth certain elections governing this Collateral Annex.

"Collateral Requirement" shall have the meaning attributed to it in Paragraph 3(b).

"Collateral Threshold" means, with respect to a Party, the collateral threshold, if any, set forth in the Paragraph 10 Cover Sheet for a Party.

"Collateral Value" means (a) with respect to Cash, the face amount thereof; (b) with respect to Letters of Credit, the Valuation Percentage multiplied by the stated amount then available under the Letter of Credit to be unconditionally drawn by the beneficiary thereof; and (c) with respect to other forms of Performance Assurance, the Valuation Percentage multiplied by the fair market value on any Calculation Date of each item of Performance Assurance on deposit with, or held by or for the benefit of, a Party pursuant to this Collateral Annex as determined by such Party in a commercially reasonable manner.

"Credit Rating" means with respect to any entity, on any date of determination, the respective ratings then assigned to such entity's unsecured, senior long-term debt or deposit obligations (not supported by third party credit enhancement) by S&P, Moody's or other specified rating agency or agencies or if such entity does not have a rating for its unsecured, senior long-term debt or deposit obligations, then the rating assigned to such entity as its "corporate credit rating" by S&P.

"Credit Rating Event" shall have the meaning attributed to it in Paragraph 6(a)(iii).

"Current Mark-to-Market Value" of an outstanding Transaction, on any Calculation Date, means the amount, as calculated in good faith and in a commercially reasonable manner, which a Party to the Agreement would pay to (a negative Current Mark-to-Market Value) or receive from (a positive Current Mark-to-Market Value) the other Party as the Settlement Amount (calculated at the mid-point between the bid price and the offer price) for such Transaction.

"Custodian" shall have the meaning attributed to it in Paragraph 6(a)(I).

"Downgraded Party" shall have the meaning attributed to it in Paragraph 6(a)(I).

"Eligible Collateral" means, with respect to a Party, the Performance Assurance specified for such Party on the Paragraph 10 Cover Sheet.

"Exposure" of one Party ("Party X") to the other Party ("Party Y") for each Transaction means (without duplication) as of any Calculation Date the sum of the following:

- (a) the aggregate of all amounts in respect of such Transaction that are owed or otherwise accrued and payable (regardless of whether such amounts have been or could be invoiced) to Party X and that remain unpaid as of such Calculation Date minus the aggregate of all amounts in respect of such Transaction that are owed or

otherwise accrued and payable (regardless of whether such amounts have been or could be invoiced) to Party Y and that remain unpaid as of such Calculation Date; plus

(b) the Current Mark-to-Market Value of such Transaction to Party X.

"Exposure Amount" shall have the meaning set forth in Paragraph 3(a).

"Independent Amount" means, with respect to a Party, the amount, if any, set forth in the Paragraph 10 Cover Sheet for such Party (which amount, if designated, shall either be a Fixed Independent Amount, a Full Floating Independent Amount or a Partial Floating Independent Amount, in each case, as designated on the Paragraph 10 Cover Sheet), or if no amount is specified, zero, or with respect to either Party, an additional or reduced amount agreed to as such for that Party in respect of a Transaction.

"Interest Amount" means with respect to a Party and an Interest Period, the sum of the daily interest amounts for all days in such Interest Period; each daily interest amount to be determined by such Party as follows: (a) the amount of Cash held by such Party on that day; multiplied by (b) the Interest Rate for that day, divided by (c) 360.

"Interest Period" means the period from (and including) the last Local Business Day on which an Interest Amount was Transferred by a Party (or if no Interest Amount has yet been Transferred by such Party, the Local Business Day on which Cash was Transferred to such Party) to (but excluding) the Local Business Day on which the current Interest Amount is to be Transferred.

"Interest Rate" means, in respect of a Party holding Cash, the rate specified for such Party in the Paragraph 10 Cover Sheet.

"Letter of Credit" means an irrevocable, transferable, standby letter of credit, issued by a major U.S. commercial bank or the U.S. branch office of a foreign bank with, in either case, a Credit Rating of at least (a) "A-" by S&P and "A3" by Moody's, if such entity is rated by both S&P and Moody's or (b) "A-" by S&P or "A3" by Moody's, if such entity is rated by either S&P or Moody's but not both, substantially in the form set forth in Schedule 1 attached hereto, with such changes to the terms in that form as the issuing bank may require and as may be acceptable to the beneficiary thereof.

"Letter of Credit Default" means with respect to a Letter of Credit, the occurrence of any of the following events: (a) the issuer of such Letter of Credit shall fail to maintain a Credit Rating of at least (i) "A-" by S&P or "A3" by Moody's, if such issuer is rated by both S&P and Moody's, (ii) "A-" by S&P, if such issuer is rated only by S&P, or (iii) "A3" by Moody's, if such issuer is rated only by Moody's; (b) the issuer of the Letter of Credit shall fail to comply with or perform its obligations under such Letter of Credit; (c) the issuer of such Letter of Credit shall disaffirm, disclaim, repudiate or reject, in whole or in part, or challenge the validity of, such Letter of Credit; (d) such Letter of Credit shall expire or terminate, or shall fail or cease to be in full force and effect at any time during the term of the Agreement, in any such case without replacement; or (e) the

issuer of such Letter of Credit shall become Bankrupt; provided, however, that no Letter of Credit Default shall occur or be continuing in any event with respect to a Letter of Credit after the time such Letter of Credit is required to be canceled or returned to a Party in accordance with the terms of this Collateral Annex.

"Local Business Day" means, a day on which commercial banks are open for business (a) in relation to any payment, in the place where the relevant account is located and (b) in relation to any notice or other communication, in the city specified in the address for notice provided by the recipient.

"Minimum Transfer Amount" means, with respect to a Party, the amount, if any, set forth in the Paragraph 10 Cover Sheet for such Party.

"Net Exposure" shall have the meaning attributed to it in Paragraph 3(a).

"Notification Time" means 11:00, New York time, on any Calculation Date or any different time specified in the Paragraph 10 Cover Sheet.

"Obligations" shall have the meaning attributed to it in Paragraph 2.

"Performance Assurance" means all Eligible Collateral, all other property acceptable to the Party to which it is Transferred, and all proceeds thereof, that has been Transferred to or received by a Party hereunder and not subsequently Transferred to the other Party pursuant to Paragraph 5 or otherwise received by the other Party. Any Interest Amount or portion thereof not Transferred pursuant to Paragraph 6(a)(iv) and any Cash received and held by a Party after drawing on any Letter of Credit will constitute Performance Assurance in the form of Cash, until all or any portion of such Cash is applied against Obligations owing to such Party pursuant to the provisions of this Collateral Annex. Any guaranty agreement executed by a Guarantor of a Party shall not constitute Performance Assurance hereunder.

"Pledging Party" shall have the meaning attributed to it in Paragraph 3(b).

"Qualified Institution" means a commercial bank or trust company organized under the laws of the United States or a political subdivision thereof, with (I) a Credit Rating of at least (a) "A-" by S&P and "A3" by Moody's, if such entity is rated by both S&P and Moody's or (b) "A-" by S&P or "A3" by Moody's, if such entity is rated by either S&P or Moody's but not both, and (ii) having a capital and surplus of at least \$1,000,000,000.

"Reference Market-maker" means a leading dealer in the relevant market selected by a Party determining its Exposure in good faith from among dealers of the highest credit standing which satisfy all the criteria that such Party applies generally at the time in deciding whether to offer or to make an extension of credit.

"Rounding Amount" means, with respect to a Party, the amount, if any, set forth in the Paragraph 10 Cover Sheet for such Party.

"Secured Party" shall have the meaning attributed to it in Paragraph 3(b).

"Transfer" means, with respect to any Performance Assurance or Interest Amount, and in accordance with the instructions of the Party entitled thereto:

(a) in the case of Cash, payment or transfer by wire transfer into one or more bank accounts specified by the recipient;

(b) in the case of Letters of Credit, delivery of the Letter of Credit or an amendment thereto to the recipient; and

(c) in the case of any other type of Performance Assurance, delivery thereof as specified by the recipient.

"Valuation Percentage" means, with respect to any Performance Assurance designated as Eligible Collateral on the Paragraph 10 Cover Sheet, the Valuation Percentage specified for such Performance Assurance on the Paragraph 10 Cover Sheet.

Paragraph 2. Encumbrance; Grant of Security Interest.

As security for the prompt and complete payment of all amounts due or that may now or hereafter become due from a Party to the other Party and the performance by a Party of all covenants and obligations to be performed by it pursuant to this Collateral Annex, the Agreement, all outstanding Transactions and any other documents, instruments or agreements executed in connection therewith (collectively, the "Obligations"), each Party hereby pledges, assigns, conveys and transfers to the other Party, and hereby grants to the other Party a present and continuing security interest in and to, and a general first lien upon and right of set off against, all Performance Assurance which has been or may in the future be Transferred to, or received by, the other Party and/or its Custodian, and all dividends, interest, and other proceeds from time to time received, receivable or otherwise distributed in respect of, or in exchange for, any or all of the foregoing and each Party agrees to take such action as the other Party reasonably requests in order to perfect the other Party's continuing security interest in, and lien on (and right of setoff against), such Performance Assurance.

Paragraph 3. Calculations of Collateral Requirement.

(a) On any Calculation Date, the "Exposure Amount" for each Party shall be calculated for all Transactions for which there are any Obligations remaining unpaid or unperformed, by calculating each Party's Exposure to the other Party in respect of each such Transaction and determining the net aggregate sum of all Exposures for all Transactions for each Party. The Party having the greater Exposure Amount at any time (the "Secured Party") shall be deemed to have a "Net Exposure" to the other Party equal to the Secured Party's Exposure Amount.

(b) The "Collateral Requirement" for a Party (the "Pledging Party") means the Secured Party's Net Exposure minus the sum of:

(1) the Pledging Party's Collateral Threshold; plus

(2) the amount of Cash previously Transferred to the Secured Party, the amount of Cash held by the Secured Party as Performance Assurance as a result of drawing under any Letter of Credit, and any Interest Amount that has not yet been Transferred to the Pledging Party; plus

(3) the Collateral Value of each Letter of Credit and any other form of Performance Assurance (other than Cash) maintained by the Pledging Party for the benefit of the Secured Party; provided, however, that, the Collateral Requirement of a Party will be deemed to be zero (0) whenever the calculation of such Party's Collateral Requirement yields a number less than zero (0).

Paragraph 4. Delivery of Performance Assurance.

On any Calculation Date on which (a) no Event of Default or Potential Event of Default has occurred and is continuing with respect to the Secured Party, (b) no Early Termination Date has occurred or been designated as a result of an Event of Default with respect to the Secured Party for which there exist any unsatisfied payment Obligations, and (c) the Pledging Party's Collateral Requirement equals or exceeds its Minimum Transfer Amount, then the Secured Party may demand that the Pledging Party Transfer to the Secured Party, and the Pledging Party shall, after receiving such notice from the Secured Party, Transfer, or cause to be Transferred to the Secured Party, Performance Assurance for the benefit of the Secured Party, having a Collateral Value at least equal to the Pledging Party's Collateral Requirement. The amount of Performance Assurance required to be Transferred hereunder shall be rounded up to the nearest integral multiple of the Rounding Amount. Unless otherwise agreed in writing by the Parties, (i) Performance Assurance demanded of a Pledging Party on or before the Notification Time on a Local Business Day shall be provided by the close of business on the next Local Business Day and (ii) Performance Assurance demanded of a Pledging Party after the Notification Time on a Local Business Day shall be provided by the close of business on the second Local Business Day thereafter. Any Letter of Credit or other type of Performance Assurance (other than Cash) shall be Transferred to such address as the Secured Party shall specify and any such demand made by the Secured Party pursuant to this Paragraph 4 shall specify account information for the account to which Performance Assurance in the form of Cash shall be Transferred.

Paragraph 5. Reduction and Substitution of Performance Assurance.

(a) On any Local Business Day (but no more frequently than weekly with respect to Letters of Credit and daily with respect to Cash), a Pledging Party may request a reduction in the amount of Performance Assurance previously provided by the Pledging Party for the benefit of the Secured Party, provided that, after giving effect to the requested reduction in Performance Assurance, (i) the Pledging Party shall in fact have a Collateral Requirement of zero; (ii) no Event of Default or Potential Event of Default with respect to the Pledging Party shall have occurred and be continuing; and (iii) no Early Termination Date has occurred or been designated as a result of an Event of

Default with respect to the Pledging Party for which there exist any unsatisfied payment Obligations. A permitted reduction in Performance Assurance may be effected by the Transfer of Cash to the Pledging Party or the reduction of the amount of an outstanding Letter of Credit previously issued for the benefit of the Secured Party. The amount of Performance Assurance required to be reduced hereunder shall be rounded down to the nearest integral multiple of the Rounding Amount. The Pledging Party shall have the right to specify the means of effecting the reduction in Performance Assurance. In all cases, the cost and expense of reducing Performance Assurance (including, but not limited to, the reasonable costs, expenses, and attorneys' fees of the Secured Party) shall be borne by the Pledging Party. Unless otherwise agreed in writing by the Parties, (i) if the Pledging Party's reduction demand is made on or before the Notification Time on a Business Day, then the Secured Party shall have one (1) Local Business Day to effect a permitted reduction in Performance Assurance and (ii) if the Pledging Party's reduction demand is made after the Notification Time on a Local Business Day, then the Secured Party shall have two (2) Local Business Days to effect a permitted reduction in Performance Assurance, in each case, if such reduction is to be effected by the return of Cash to the Pledging Party. If a permitted reduction in Performance Assurance is to be effected by a reduction in the amount of an outstanding Letter of Credit previously issued for the benefit of the Secured Party, the Secured Party shall promptly take such action as is reasonably necessary to effectuate such reduction.

(b) Except when (i) an Event of Default or Potential Event of Default with respect to the Pledging Party shall have occurred and be continuing or (ii) an Early Termination Date has occurred or been designated as a result of an Event of Default with respect to the Pledging Party for which there exist any unsatisfied payment Obligations, the Pledging Party may substitute Performance Assurance for other existing Performance Assurance of equal Collateral Value upon one (1) Local Business Day's written notice (provided such notice is made on or before the Notification Time, otherwise the notification period shall be two (2) Local Business Days) to the Secured Party; provided, however, that if such substitute Performance Assurance is of a type not otherwise approved by this Collateral Annex, then the Secured Party must consent to such substitution. Upon the Transfer to the Secured Party and/or its Custodian of the substitute Performance Assurance, the Secured Party and/or its Custodian shall Transfer the relevant replaced Performance Assurance to the Pledging Party within two (2) Local Business Days. Notwithstanding anything herein to the contrary, no such substitution shall be permitted unless (i) the substitute Performance Assurance is Transferred simultaneously or has been Transferred to the Secured Party and/or its Custodian prior to the release of the Performance Assurance to be returned to the Pledging Party and the security interest in, and general first lien upon, such substituted Performance Assurance granted pursuant hereto in favor of the Secured Party shall have been perfected as required by applicable law and shall constitute a first priority perfected security interest therein and general first lien thereon, and (ii) after giving effect to such substitution, the Collateral Value of such substitute Performance Assurance shall equal the greater of the Pledging Party's Collateral Requirement or the Pledging Party's Minimum Transfer Amount. Each substitution of Performance Assurance shall constitute a representation and warranty by the Pledging Party that the substituted Performance Assurance shall be

subject to and governed by the terms and conditions of this Collateral Annex, including without limitation the security interest in, general first lien on and right of offset against, such substituted Performance Assurance granted pursuant hereto in favor of the Secured Party pursuant to Paragraph 2.

(c) The Transfer of any Performance Assurance by the Secured Party and/or its Custodian in accordance with this Paragraph 5 shall be deemed a release by the Secured Party of its security interest, general first lien and right of offset granted pursuant to Paragraph 2 hereof only with respect to such returned Performance Assurance. In connection with each Transfer of any Performance Assurance pursuant to this Paragraph 5, the Pledging Party will, upon request of the Secured Party, execute a receipt showing the Performance Assurance Transferred to it.

Paragraph 6. Administration of Performance Assurance.

(a) Cash. Performance Assurance provided in the form of Cash to a Party that is the Secured Party shall be subject to the following provisions.

(i) If such Party is entitled to hold Cash, then it will be entitled to hold Cash or to appoint an agent which is a Qualified Institution (a "Custodian") to hold Cash for it provided that the conditions for holding Cash that are set forth on the Paragraph 10 Cover Sheet for such Party are satisfied. If such Party is not entitled to hold Cash, then the provisions of Paragraph 6(a)(ii) shall not apply with respect to such Party and Cash shall be held in a Qualified Institution in accordance with the provisions of Paragraph 6(a)(ii)(B). Upon notice by the Secured Party to the Pledging Party of the appointment of a Custodian, the Pledging Party's obligations to make any Transfer will be discharged by making the Transfer to that Custodian. The holding of Cash by a Custodian will be deemed to be the holding of Cash by the Secured Party for which the Custodian is acting. If the Secured Party or its Custodian fails to satisfy any conditions for holding Cash as set forth above or in the Paragraph 10 Cover Sheet or if the Secured Party is not entitled to hold Cash at any time, then the Secured Party will Transfer, or cause its Custodian to Transfer, the Cash to a Qualified Institution and the Cash shall be maintained in accordance with Paragraph 6(a)(ii)(B), with the Party not eligible to hold Cash being considered the "Downgraded Party" (as defined below). Except as set forth in Paragraph 6(c), the Secured Party will be liable for the acts or omissions of its Custodian to the same extent that the Secured Party would be liable hereunder for its own acts or omissions.

(ii) Use of Cash. Notwithstanding the provisions of applicable law, if no Event of Default has occurred and is continuing with respect to the Secured Party and no Early Termination Date has occurred or been designated as a result of an Event of Default with respect to the Secured Party for which there exist any unsatisfied payment Obligations, then the Secured Party shall have the right to sell, pledge, rehypothecate, assign, invest, use, commingle or otherwise use in its business any Cash that it holds as Performance Assurance hereunder, free from any claim or right of any nature whatsoever of the Pledging Party, including any equity or right of redemption by the Pledging Party; provided, however, that if a Party or its Custodian is not eligible to hold Cash pursuant to

Paragraph 6(a) (such Party shall be the "Downgraded Party" and the event that caused it or its Custodian to be ineligible to hold Cash shall be a "Credit Rating Event") then:

(A) the provisions of this Paragraph 6(a)(ii) will not apply with respect to the Downgraded Party; and

(B) the Downgraded Party shall be required to Transfer (or cause to be Transferred) not later than the close of business on the next Local Business Day following such Credit Rating Event all Cash in its possession or held on its behalf to a Qualified Institution approved by the non-Downgraded Party (which approval shall not be unreasonably withheld), to a segregated, safekeeping or custody account (the "Collateral Account") within such Qualified Institution with the title of the account indicating that the property contained therein is being held as Cash for the Downgraded Party. The Qualified Institution shall serve as Custodian with respect to the Cash in the Collateral Account, and shall hold such Cash in accordance with the terms of this Collateral Annex and for the security interest of the Downgraded Party and execute such account control agreements as are necessary or applicable to perfect the security interest of the Non-Downgraded Party therein pursuant to Section 9-314 of the Uniform Commercial Code or otherwise, and subject to such security interest, for the ownership and benefit of the non-Downgraded Party. The Qualified Institution holding the Cash will invest and reinvest or procure the investment and reinvestment of the Cash in accordance with the written instructions of the Pledging Party, subject to the approval of such instructions by the Downgraded Party (which approval shall not be unreasonably withheld), provided that the Qualified Institution shall not be required to so invest or reinvest or procure such investment or reinvestment if an Event of Default or Potential Event of Default with respect to the Pledging Party shall have occurred and be continuing. The Downgraded Party shall have no responsibility for any losses resulting from any investment or reinvestment effected in accordance with the Pledging Party's instructions.

(iii) Interest Payments on Cash. So long as no Event of Default or Potential Event of Default with respect to the Pledging Party has occurred and is continuing, and no Early Termination Date for which any unsatisfied payment Obligations of the Pledging Party exist has occurred or been designated as the result of an Event of Default with respect to the Pledging Party, and to the extent that an obligation to Transfer Performance Assurance would not be created or increased by the Transfer, in the event that the Secured Party or its Custodian is holding Cash, the Secured Party will Transfer (or caused to be Transferred) to the Pledging Party, in lieu of any interest or other amounts paid or deemed to have been paid with respect to such Cash (all of which may be retained by the Secured Party or its Custodian), the Interest Amount. The Pledging Party shall invoice the Secured Party monthly setting forth the calculation of the Interest Amount due, and the Secured Party shall make payment thereof by the later of (A) the third Local Business Day of the first month after the last month to which such invoice relates or (B) the third Local Business Day after the day on which such invoice is received. On or after the occurrence of a Potential Event of Default or an Event of Default with respect to the Pledging Party or an Early Termination Date as a result of an Event of Default with respect to the Pledging Party, the Secured Party or its Custodian

shall retain any such Interest Amount as additional Performance Assurance hereunder until the obligations of the Pledging Party under the Agreement have been satisfied in the case of an Early Termination Date or for so long as such Event of Default is continuing in the case of an Event of Default.

(b) Letters of Credit. Performance Assurance provided in the form of a Letter of Credit shall be subject to the following provisions.

(i) Unless otherwise agreed to in writing by the parties, each Letter of Credit shall be provided in accordance with Paragraph 4, and each Letter of Credit shall be maintained for the benefit of the Secured Party. The Pledging Party shall (A) renew or cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit, (B) if the bank that issued an outstanding Letter of Credit has indicated its intent not to renew such Letter of Credit, provide either a substitute Letter of Credit or other Eligible Collateral, in each case at least twenty (20) Local Business Days prior to the expiration of the outstanding Letter of Credit, and (C) if a bank issuing a Letter of Credit shall fail to honor the Secured Party's properly documented request to draw on an outstanding Letter of Credit, provide for the benefit of the Secured Party either a substitute Letter of Credit that is issued by a bank acceptable to the Secured Party or other Eligible Collateral, in each case within one (1) Local Business Day after such refusal, provided that, as a result of the Pledging Party's failure to perform in accordance with (A), (B), or (C) above, the Pledging Party's Collateral Requirement would be greater than zero.

(ii) As one method of providing Performance Assurance, the Pledging Party may increase the amount of an outstanding Letter of Credit or establish one or more additional Letters of Credit.

(iii) Upon the occurrence of a Letter of Credit Default, the Pledging Party agrees to Transfer to the Secured Party either a substitute Letter of Credit or other Eligible Collateral, in each case on or before the first Local Business Day after the occurrence thereof (or the fifth (5th) Local Business Day after the occurrence thereof if only clause (a) under the definition of Letter of Credit Default applies).

(iv) (A) Upon or at any time after the occurrence and continuation of an Event of Default with respect to the Pledging Party, or (B) if an Early Termination Date has occurred or been designated as a result of an Event of Default with respect to the Pledging Party for which there exist any unsatisfied payment Obligations, then the Secured Party may draw on the entire, undrawn portion of any outstanding Letter of Credit upon submission to the bank issuing such Letter of Credit of one or more certificates specifying that such Event of Default or Early Termination Date has occurred and is continuing. Cash proceeds received from drawing upon the Letter of Credit shall be deemed Performance Assurance as security for the Pledging Party's obligations to the Secured Party and the Secured Party shall have the rights and remedies set forth in Paragraph 7 with respect to such cash proceeds. Notwithstanding the Secured Party's receipt of Cash proceeds of a drawing under the Letter of Credit, the Pledging Party shall remain liable (y) for any failure to Transfer sufficient Performance Assurance or (z) for

any amounts owing to the Secured Party and remaining unpaid after the application of the amounts so drawn by the Secured Party.

(v) In all cases, the costs and expenses (including but not limited to the reasonable costs, expenses, and attorneys' fees of the Secured Party) of establishing, renewing, substituting, canceling, and increasing the amount of a Letter of Credit shall be borne by the Pledging Party.

(c) Care of Performance Assurance. Except as otherwise provided in Paragraph 6(a)(iii) and beyond the exercise of reasonable care in the custody thereof, the Secured Party shall have no duty as to any Performance Assurance in its possession or control or in the possession or control of any Custodian or any income thereon or as to the preservation of rights against prior parties or any other rights pertaining thereto. The Secured Party shall be deemed to have exercised reasonable care in the custody and preservation of the Performance Assurance in its possession, and/or in the possession of its agent for safekeeping, if the Performance Assurance is accorded treatment substantially equal to that which it accords its own property, and shall not be liable or responsible for any loss or damage to any of the Performance Assurance, or for any diminution in the value thereof, by reason of the act or omission of any Custodian selected by the Secured Party in good faith except to the extent such loss or damage is the result of such agent's willful misconduct or negligence. Unless held by a Custodian, the Secured Party shall at all times retain possession or control of any Performance Assurance Transferred to it. The holding of Performance Assurance by a Custodian for the benefit of the Secured Party shall be deemed to be the holding and possession of such Performance Assurance by the Secured Party for the purpose of perfecting the security interest in the Performance Assurance. Except as otherwise provided in Paragraph 6(a)(ii), nothing in this Collateral Annex shall be construed as requiring the Secured Party to select a Custodian for the keeping of Performance Assurance for its benefit.

Paragraph 7. Exercise of Rights Against Performance Assurance.

(a) In the event that (i) an Event of Default with respect to the Pledging Party has occurred and is continuing or (ii) an Early Termination Date has occurred or been designated as a result of an Event of Default with respect to the Pledging Party, the Secured Party may exercise any one or more of the rights and remedies provided under the Agreement, in this Collateral Annex or as otherwise available under applicable law. Without limiting the foregoing, if at any time (i) an Event of Default with respect to the Pledging Party has occurred and is continuing, or (ii) an Early Termination Date occurs or is deemed to occur as a result of an Event of Default with respect to the Pledging Party, then the Secured Party may, in its sole discretion, exercise any one or more of the following rights and remedies:

- (i) all rights and remedies available to a secured party under the Uniform Commercial Code and any other applicable jurisdiction and other applicable laws with respect to the Performance Assurance held by or for the benefit of the Secured Party;

- (ii) the right to set off any Performance Assurance held by or for the benefit of the Secured Party against and in satisfaction of any amount payable by the Pledging Party in respect of any of its Obligations;
- (iii) the right to draw on any outstanding Letter of Credit issued for its benefit; and/or
- (iv) the right to liquidate any Performance Assurance held by or for the benefit of the Secured Party through one or more public or private sales or other dispositions with such notice, if any, as may be required by applicable law, free from any claim or right of any nature whatsoever of the Pledging Party, including any right of equity or redemption by the Pledging Party (with the Secured Party having the right to purchase any or all of the Performance Assurance to be sold) and to apply the proceeds from the liquidation of such Performance Assurance to and in satisfaction of any amount payable by the Pledging Party in respect of any of its Obligations in such order as the Secured Party may elect.

(b) The Pledging Party hereby irrevocably constitutes and appoints the Secured Party and any officer or agent thereof, with full power of substitution, as the Pledging Party's true and lawful attorney-in-fact with full irrevocable power and authority to act in the name, place and stead of the Pledging Party or in the Secured Party's own name, from time to time in the Secured Party's discretion, for the purpose of taking any and all action and executing and delivering any and all documents or instruments which may be necessary or desirable to accomplish the purposes of Paragraph 7(a).

(c) Secured Party shall be under no obligation to prioritize the order with respect to which it exercises any one or more rights and remedies available hereunder. The Pledging Party shall in all events remain liable to the Secured Party for any amount payable by the Pledging Party in respect of any of its Obligations remaining unpaid after any such liquidation, application and set off.

(d) In addition to the provisions of Paragraph 7(a), if at any time (i) an Event of Default with respect to the Secured Party has occurred and is continuing or (ii) an Early Termination Date has occurred or been designated as a result of an Event of Default with respect to the Secured Party, then:

(1) the Secured Party will be obligated immediately to Transfer all Performance Assurance (including any Letter of Credit) and the Interest Amount, if any, to the Pledging Party;

(2) the Pledging Party may do any one or more of the following: (x) exercise any of the rights and remedies of a pledgor with respect to the Performance Assurance, including any such rights and remedies under law then in effect; (y) to the extent that the Performance Assurance or the Interest Amount is not Transferred to the Pledging Party as required in (1) above, setoff amounts payable to the Secured Party against

the Performance Assurance (other than Letters of Credit) held by the Secured Party or to the extent its rights to setoff are not exercised, withhold payment of any remaining amounts payable by the Pledging Party, up to the value of any remaining Performance Assurance held by the Secured Party, until the Performance Assurance is Transferred to the Pledging Party; and (z) exercise rights and remedies available to the Pledging Party under the terms of any Letter of Credit; and

(3) the Secured Party shall be prohibited from drawing on any Letter of Credit that has been posted by the Pledging Party for its benefit.

Paragraph 8. Disputed Calculations

(a) If the Pledging Party disputes the amount of Performance Assurance requested by the Secured Party and such dispute relates to the amount of the Net Exposure claimed by the Secured Party, then the Pledging Party shall (i) notify the Secured Party of the existence and nature of the dispute not later than the Notification Time on the first Local Business Day following the date that the demand for Performance Assurance is made by the Secured Party pursuant to Paragraph 4, and (ii) provide Performance Assurance to or for the benefit of the Secured Party in an amount equal to the Pledging Party's own estimate, made in good faith and in a commercially reasonable manner, of the Pledging Party's Collateral Requirement in accordance with Paragraph 4. In all such cases, the Parties thereafter shall promptly consult with each other in order to reconcile the two conflicting amounts. If the Parties have not been able to resolve their dispute on or before the second Business Day following the date that the demand is made by the Secured Party, then the Secured Party's Net Exposure shall be recalculated by each Party requesting quotations from one (1) Reference Market-Maker within two (2) Business Days (taking the arithmetic average of those obtained to obtain the average Current Mark-to-Market Value; provided, that, if only one (1) quotation can be obtained, then that quotation shall be used) for the purpose of recalculating the Current Mark-to-Market Value of each Transaction in respect of which the Parties disagree as to the Current Mark-to-Market Value thereof, and the Secured Party shall inform the Pledging Party of the results of such recalculation (in reasonable detail). Performance Assurance shall thereupon be provided, returned, or reduced, if necessary, on the next Local Business Day in accordance with the results of such recalculation.

(b) If the Secured Party disputes the amount of Performance Assurance to be reduced by the Secured Party and such dispute relates to the amount of the Net Exposure claimed by the Secured Party, then the Secured Party shall (i) notify the Pledging Party of the existence and nature of the dispute not later than the Notification Time on the first Local Business Day following the date that the demand to reduce Performance Assurance is made by the Pledging Party pursuant to Paragraph 5(a), and (ii) effect the reduction of Performance Assurance to or for the benefit of the Pledging Party in an amount equal to the Secured Party's own estimate, made in good faith and in a commercially reasonable manner, of the Pledging Party's Collateral Requirement in accordance with Paragraph 5(a). In all such cases, the Parties thereafter shall promptly consult with each other in order to reconcile the two conflicting amounts. If the Parties have not been able to resolve their dispute on or before the second Local Business Day following the date that

the demand is made by the Pledging Party, then the Secured Party's Net Exposure shall be recalculated by each Party requesting quotations from one (1) Reference Market-Maker within two (2) Business Days (taking the arithmetic average of those obtained to obtain the average Current Mark-to-Market Value; provided, that, if only one (1) quotation can be obtained, then that quotation shall be used) for the purpose of recalculating the Current Mark-to-Market Value of each Transaction in respect of which the Parties disagree as to the Current Mark-to-Market Value thereof, and the Secured Party shall inform the Pledging Party of the results of such recalculation (in reasonable detail). Performance Assurance shall thereupon be provided, returned, or reduced, if necessary, on the next Local Business Day in accordance with the results of such recalculation.

Paragraph 9. Covenants; Representations and Warranties; Miscellaneous.

(a) The Pledging Party will execute and deliver to the Secured Party (and to the extent permitted by applicable law, the Pledging Party hereby authorizes the Secured Party to execute and deliver, in the name of the Pledging Party or otherwise) such financing statements, assignments and other documents and do such other things relating to the Performance Assurance and the security interest granted under this Collateral Annex, including any action the Secured Party may deem necessary or appropriate to perfect or maintain perfection of its security interest in the Performance Assurance, and the Pledging Party shall pay all costs relating to its Transfer of Performance Assurance and the maintenance and perfection of the security interest therein.

(b) On each day on which Performance Assurance is held by the Secured Party and/or its Custodian under the Agreement and this Collateral Annex, the Pledging Party hereby represents and warrants that:

(i) the Pledging Party has good title to and is the sole owner of such Performance Assurance, and the execution, delivery and performance of the covenants and agreements of this Collateral Annex, do not result in the creation or imposition of any lien or security interest upon any of its assets or properties, including, without limitation, the Performance Assurance, other than the security interests and liens created under the Agreement and this Collateral Annex;

(ii) upon the Transfer of Performance Assurance by the Pledging Party to the Secured Party and/or its Custodian, the Secured Party shall have a valid and perfected first priority continuing security interest therein, free of any liens, claims or encumbrances, except those liens, security interests, claims or encumbrances arising by operation of law that are given priority over a perfected security interest; and

(iii) it is not and will not become a party to or otherwise be bound by any agreement, other than the Agreement and this Collateral Annex, which restricts in any manner the rights of any present or future holder of any of the Performance Assurance with respect hereto.

(c) This Collateral Annex has been and is made solely for the benefit of the Parties and their permitted successors and assigns, and no other person, partnership, association, corporation or other entity shall acquire or have any right under or by virtue of this Collateral Annex.

(d) The Pledging Party shall pay on request and indemnify the Secured Party against any taxes (including without limitation, any applicable transfer taxes and stamp, registration or other documentary taxes), assessments, or charges that may become payable by reason of the security interests, general first lien and right of offset granted under this Collateral Annex or the execution, delivery, performance or enforcement of the Agreement and this Collateral Annex, as well as any penalties with respect thereto (including, without limitation costs and reasonable fees and disbursements of counsel). The Parties each agree to pay the other Party for all reasonable expenses (including without limitation, court costs and reasonable fees and disbursements of counsel) incurred by the other in connection with the enforcement of, or suing for or collecting any amounts payable by it under, the Agreement and this Collateral Annex.

(e) No failure or delay by either Party hereto in exercising any right, power, privilege, or remedy hereunder shall operate as a waiver thereof.

(f) The headings in this Collateral Annex are for convenience of reference only, and shall not affect the meaning or construction of any provision thereof.

PARAGRAPH 10
to the
COLLATERAL ANNEX
to the
EEI MASTER POWER PURCHASE AND SALE AGREEMENT

CREDIT ELECTIONS COVER SHEET

Between
Carolina Power & Light Company
d/b/a Progress Energy Carolinas, Inc. ("PEC" or "Party A")
and
Morgan Stanley Capital Group Inc. ("MSCGI" or "Party B")

Paragraph 10. Elections and Variables

I. Collateral Threshold.

A. Party A Collateral Threshold.

- ☐ \$ _____ (the "Threshold Amount"); provided, however, that the Collateral Threshold for Party A shall be zero upon the occurrence and during the continuance of an Event of Default or a Potential Event of Default with respect to Party A; and provided further that, in the event that, and on the date that, Party A cures the Potential Event of Default on or prior to the date that Party A is required to post Performance Assurance to Party B pursuant to a demand made by Party B pursuant to the provisions of the Collateral Annex on or after the occurrence of such Potential Event of Default, (i) the Collateral Threshold for Party A shall automatically increase from zero to the Threshold Amount and (ii) Party A shall be relieved of its obligation to post Performance Assurance pursuant to such demand.
- ☐ (a) The amount (the "Threshold Amount") set forth below under the heading "Party A Collateral Threshold" opposite the Credit Rating for [Party A][Party A's Guarantor] on the relevant date of determination, or (b) zero if on the relevant date of determination [Party A][its Guarantor] does not have a Credit Rating from the rating agency specified below or an Event of Default or a Potential Event of Default with respect to Party A has occurred and is continuing; provided, however, in the event that, and on the date that, Party A cures the Potential Event of Default on or prior to the date that Party A is required to post Performance Assurance to Party B pursuant to a demand made by Party B pursuant to the provisions of the Collateral Annex on or after the occurrence of such Potential Event of Default, (i) the Collateral Threshold for Party A shall automatically increase from zero to the Threshold Amount and (ii) Party A shall be relieved of its obligation to post Performance Assurance pursuant to such demand.

Party A	
<u>Collateral Threshold</u>	<u>Credit Rating</u>
\$ _____	_____ (or above)
\$ _____	_____
\$ _____	_____
\$ _____	_____
\$ _____	Below _____

- ☒ The lesser of: (a) the amount (the "Threshold Amount") set forth below under the heading "Party A Collateral Threshold" opposite the Credit Rating for Party A's Guarantor on the relevant date of determination, and if Party A's Guarantor's Credit Ratings shall not be equivalent, the lower Credit Rating shall govern, and if Party A's Guarantor shall have only one Credit Rating, such Credit Rating shall govern; or (b) zero if on the relevant date of determination its Guarantor does not have a Credit Rating from either of the rating agency(ies) specified below or an Event of Default or a Potential Event of Default with respect to Party A has occurred and is continuing; provided, however, in the event that, and on the date that, Party A cures the Potential Event of Default on or prior to the date that Party A is required to post Performance Assurance to Party B pursuant to a demand made by Party B pursuant to the provisions of the Collateral Annex on or after the occurrence of such Potential Event of Default, (i) the Collateral Threshold for Party A shall automatically increase from zero to the Threshold Amount and (ii) Party A shall be relieved of its obligation to post Performance Assurance pursuant to such demand.

Party A		
<u>Collateral Threshold</u>	<u>S&P Credit Rating</u>	<u>Moody's Credit Rating</u>
\$30,000,000	AAA	Aaa
\$25,000,000	AA+	Aa1
\$25,000,000	AA	Aa2
\$25,000,000	AA-	Aa3
\$20,000,000	A+	A1
\$20,000,000	A	A2
\$20,000,000	A-	A3
\$16,000,000	BBB+	Baa1
\$12,000,000	BBB	Baa2
\$5,000,000	BBB-	Baa3
\$ 0 (zero)	Below BBB-	Below Baa3

- ☐ The amount of the Guaranty Agreement dated _____ from _____, as amended from time to time but in no event shall Party A's Collateral Threshold be greater than \$ _____.
- ☐ Other – see attached threshold terms

B. Party B Collateral Threshold.

- ☐ \$ _____ (the "Threshold Amount"); provided, however, that the Collateral Threshold for Party B shall be zero upon the occurrence and during the continuance of an Event of Default or a Potential Event of Default with respect to Party B; and provided further that, in the event that, and on the date that, Party B cures the Potential Event of Default on or prior to the date that Party B is required to post Performance Assurance to Party A pursuant to a

demand made by Party A pursuant to the provisions of the Collateral Annex on or after the occurrence of such Potential Event of Default, (i) the Collateral Threshold for Party B shall automatically increase from zero to the Threshold Amount and (ii) Party B shall be relieved of its obligation to post Performance Assurance pursuant to such demand.

- ☐ (a) The amount (the "Threshold Amount") set forth below under the heading "Party B Collateral Threshold" opposite the Credit Rating for [Party B][Party B's Guarantor] on the relevant date of determination, or (b) zero if on the relevant date of determination [Party B][its Guarantor] does not have a Credit Rating from the rating agency specified below or an Event of Default or a Potential Event of Default with respect to Party B has occurred and is continuing; provided, however, in the event that, and on the date that, Party B cures the Potential Event of Default on or prior to the date that Party B is required to post Performance Assurance to Party A pursuant to a demand made by Party A pursuant to the provisions of the Collateral Annex on or after the occurrence of such Potential Event of Default, (i) the Collateral Threshold for Party B shall automatically increase from zero to the Threshold Amount and (ii) Party B shall be relieved of its obligation to post Performance Assurance pursuant to such demand:

<u>Party B</u> <u>Collateral Threshold</u>	<u>Credit Rating</u>
\$ _____	_____ (or above)
\$ _____	_____
\$ _____	_____
\$ _____	_____
\$ _____	Below _____

- ☒ The lesser of: (a) the amount (the "Threshold Amount") set forth below under the heading "Party B Collateral Threshold" opposite the Credit Rating for Party B on the relevant date of determination, and if Party B's Credit Ratings shall not be equivalent, the lower Credit Rating shall govern, and if Party B shall have only one Credit Rating, such Credit Rating shall govern; or (b) zero if on the relevant date of determination Party B does not have a Credit Rating from either of the rating agency(ies) specified below or an Event of Default or a Potential Event of Default with respect to Party B has occurred and is continuing; provided, however, in the event that, and on the date that, Party B cures the Potential Event of Default on or prior to the date that Party B is required to post Performance Assurance to Party A pursuant to a demand made by Party A pursuant to the provisions of the Collateral Annex on or after the occurrence of such Potential Event of Default, (i) the Collateral Threshold for Party B shall automatically increase from zero to the Threshold Amount and (ii) Party B shall be relieved of its obligation to post Performance Assurance pursuant to such demand.

<u>Party B</u> <u>Collateral Threshold</u>	<u>S&P Credit Rating</u>	<u>Moody's Credit Rating</u>
\$30,000,000	AAA	Aaa
\$25,000,000	AA+	Aa1
\$25,000,000	AA	Aa2
\$25,000,000	AA-	Aa3

\$20,000,000	A+	A1
\$20,000,000	A	A2
\$20,000,000	A-	A3
\$16,000,000	BBB+	Baa1
\$12,000,000	BBB	Baa2
\$5,000,000	BBB-	Baa3
\$ 0 (zero)	Below BBB-	Below Baa3

- ☐ The amount of the Guaranty Agreement dated _____ from _____, as amended from time to time but in no event shall Party B's Collateral Threshold be greater than \$ _____.
- ☐ Other – see attached threshold terms

II. Eligible Collateral and Valuation Percentage.

The following items will qualify as "Eligible Collateral" for the Party specified:

		<u>Party A</u>	<u>Party B</u>	<u>Valuation Percentage</u>
(A)	Cash	[X]	[X]	100%
(B)	Letters of Credit	[]	[]	100% unless either (i) a Letter of Credit Default shall have occurred and be continuing with respect to such Letter of Credit, or (ii) twenty (20) or fewer Business Days remain prior to the expiration of such Letter of Credit, in which cases the Valuation Percentage shall be zero (0).
(C)	Other	[]	[]	_____ %

III. Independent Amount.

A. Party A Independent Amount.

- ☒ Party A shall have a Fixed Independent Amount of \$0 (zero). If the Fixed Independent Amount option is selected for Party A, then Party A (which shall be a Pledging Party with respect to the Fixed IA Performance Assurance) will be required to Transfer or cause to be Transferred to Party B (which shall be a Secured Party with respect to the Fixed IA Performance Assurance) Performance Assurance with a Collateral Value equal to the amount of such Independent Amount (the "Fixed IA Performance Assurance"). The Fixed IA Performance Assurance shall not be reduced for so long as there are any outstanding obligations between the Parties as a result of the Agreement, and shall not be taken into account when calculating Party A's Collateral Requirement pursuant to the Collateral Annex. Except as expressly set forth above, the Fixed IA Performance Assurance shall be held and maintained in accordance with, and otherwise be subject to, Paragraphs 2, 5(b), 5(c), 6, 7 and 9 of the Collateral Annex.
- ☐ Party A shall have a Full Floating Independent Amount of \$ _____. If the Full Floating Independent Amount option is selected for Party A, then for purposes of calculating Party A's Collateral Requirement pursuant to Paragraph 3 of the Collateral Annex, such Full Floating Independent Amount for Party A shall be added by Party B to its Exposure Amount for purposes of determining Net Exposure pursuant to Paragraph 3(a) of the Collateral Annex.

- ☐ Party A shall have a Partial Floating Independent Amount of \$ _____. If the Partial Floating Independent Amount option is selected for Party A, then Party A will be required to Transfer or cause to be Transferred to Party B Performance Assurance with a Collateral Value equal to the amount of such Independent Amount (the "Partial Floating IA Performance Assurance") if at any time Party A otherwise has a Collateral Requirement (not taking into consideration the Partial Floating Independent Amount) pursuant to Paragraph 3 of the Collateral Annex. The Partial Floating IA Performance Assurance shall not be reduced so long as Party A has a Collateral Requirement (not taking into consideration the Partial Floating Independent Amount). The Partial Floating Independent Amount shall not be taken into account when calculating a Party's Collateral Requirements pursuant to the Collateral Annex. Except as expressly set forth above, the Partial Floating Independent Amount shall be held and maintained in accordance with, and otherwise be subject to, the Collateral Annex.

B. Party B Independent Amount.

- ☒ Party B shall have a Fixed Independent Amount of \$0 (zero). If the Fixed Independent Amount Option is selected for Party B, then Party B (which shall be a Pledging Party with respect to the Fixed IA Performance Assurance) will be required to Transfer or cause to be Transferred to Party A (which shall be a Secured Party with respect to the Fixed IA Performance Assurance) Performance Assurance with a Collateral Value equal to the amount of such Independent Amount (the "Fixed IA Performance Assurance"). The Fixed IA Performance Assurance shall not be reduced for so long as there are any outstanding obligations between the Parties as a result of the Agreement, and shall not be taken into account when calculating Party B's Collateral Requirement pursuant to the Collateral Annex. Except as expressly set forth above, the Fixed IA Performance Assurance shall be held and maintained in accordance with, and otherwise be subject to, Paragraphs 2, 5(b), 5(c), 6, 7 and 9 of the Collateral Annex.
- ☐ Party B shall have a Full Floating Independent Amount of \$ _____. If the Full Floating Independent Amount Option is selected for Party B then for purposes of calculating Party B's Collateral Requirement pursuant to Paragraph 3 of the Collateral Annex, such Full Floating Independent Amount for Party B shall be added by Party A to its Exposure Amount for purposes of determining Net Exposure pursuant to Paragraph 3(a) of the Collateral Annex.
- ☐ Party B shall have a Partial Floating Independent Amount of \$ _____. If the Partial Floating Independent Amount option is selected for Party B, then Party B will be required to Transfer or cause to be Transferred to Party A Performance Assurance with a Collateral Value equal to the amount of such Independent Amount (the "Partial Floating IA Performance Assurance") if at any time Party B otherwise has a Collateral Requirement (not taking into consideration the Partial Floating Independent Amount) pursuant to Paragraph 3 of the Collateral Annex. The Partial Floating IA Performance Assurance shall not be reduced for so long as Party B has a Collateral Requirement (not taking into consideration the Partial Floating Independent Amount). The Partial Floating Independent Amount shall not be taken into account when calculating a Party's Collateral Requirements pursuant to the Collateral Annex. Except as expressly set forth above, the Partial Floating Independent Amount shall be held and maintained in accordance with, and otherwise be subject to, the Collateral Annex.

IV. Minimum Transfer Amount.

A. Party A Minimum Transfer Amount: \$ 250,000

B. Party B Minimum Transfer Amount: \$ 250,000

V. Rounding Amount.

A. Party A Rounding Amount: \$ 250,000

B. Party B Rounding Amount: \$ 250,000

VI. Administration of Cash Collateral.

A. Party A Eligibility to Hold Cash.

☐ Party A shall not be entitled to hold Performance Assurance in the form of Cash. Performance Assurance in the form of Cash shall be held in a Qualified Institution in accordance with the provisions of Paragraph 6(a)(ii)(B) of the Collateral Annex. Party A shall pay to Party B in accordance with the terms of the Collateral Annex the amount of interest it receives from the Qualified Institution on any Performance Assurance in the form of Cash posted by Party B.

☒ Party A shall be entitled to hold Performance Assurance in the form of Cash provided that the following conditions are satisfied: (1) it is not subject to an Event of Default or Potential Event of Default, (2), Party A's Guarantor has a Credit Rating from S&P and/or Moody's and the lowest Credit Rating for Party A's Guarantor is (a) BBB- or higher by S&P and Baa3 or higher by Moody's if Party A's Guarantor is rated by both S&P and Moody's or (b) BBB- or higher by S&P or Baa3 by Moody's if Party A's Guarantor is rated by either S&P or Moody's but not both; and (3) Cash shall be held only in any jurisdiction within the United States. To the extent Party A is entitled to hold Cash, the Interest Rate payable to Party B on Cash shall be as selected below:

Party A Interest Rate.

☒ Federal Funds Effective Rate - the rate for that day opposite the caption "Federal Funds (Effective)" as set forth in the weekly statistical release designated as H.15(519), or any successor publication, published by the Board of Governors of the Federal Reserve System.

☐ Other - _____

B. Party B Eligibility to Hold Cash.

☐ Party B shall not be entitled to hold Performance Assurance in the form of Cash. Performance Assurance in the form of Cash shall be held in a Qualified Institution in accordance with the provisions of Paragraph 6(a)(ii)(B) of the Collateral Annex. Party B shall pay to Party A in accordance with the terms of the Collateral Annex the amount of interest it receives from the Qualified Institution on any Performance Assurance in the form of Cash posted by Party A.

- ☒ Party B shall be entitled to hold Performance Assurance in the form of Cash provided that the following conditions are satisfied: (1) it is not subject to an Event of Default or Potential Event of Default, (2), Party B's Guarantor has a Credit Rating from S&P and/or Moody's and the lowest Credit Rating for Party B's Guarantor is (a) BBB- or higher by S&P and Baa3 or higher by Moody's if Party B's Guarantor is rated by both S&P and Moody's or (b) BBB- or higher by S&P or Baa3 by Moody's if Party B's Guarantor is rated by either S&P or Moody's but not both; and (3) Cash shall be held only in any jurisdiction within the United States. To the extent Party B is entitled to hold Cash, the Interest Rate payable to Party A on Cash shall be as selected below:

Party B Interest Rate.

- ☒ Federal Funds Effective Rate - the rate for that day opposite the caption "Federal Funds (Effective)" as set forth in the weekly statistical release designated as H.15(519), or any successor publication, published by the Board of Governors of the Federal Reserve System.
- ☐ Other - _____

VII. Notification Time.

- ☐ Other - _____

VIII. General.

Amendments to Definitions:

"Notification Time" shall be amended by inserting "a.m." after "11:00" in the first line thereof.

"Credit Rating Event" shall be amended to replace "6(a)(iii)" with "6(a)(ii)".

"Downgraded Party" shall be amended to replace "6(a)(i)" with "6(a)(ii)".

"Letter of Credit Default" shall be amended by deleting "or" in the third line and replacing it with "and".

"Performance Assurance" shall be amended to replace "6(a)(iv)" with "6(a)(iii)".

"Secured Party" shall be amended to replace "3(b)" with "3(a)".

Amendment to Paragraph 5:

Paragraph 5(a) is amended by inserting "so long as the amount of the requested reduction is equal to or greater than the Minimum Transfer Amount" after "the Pledging Party for the benefit of the Secured Party" in the third line thereof; and (ii) by deleting "before the Notification Time on a Business Day" in line eighteen thereof and replacing it with "before the Notification Time on a Local Business Day".

Amendments to Paragraph 6:

Paragraph 6(a)(ii)(A) is amended by inserting "(other than subparagraph (B) below)" after "the provisions of this Paragraph 6(a)(ii)" in the first line thereof.

Paragraph 6(a)(ii)(B) is amended by deleting the words "to perfect the security interest of the Non-Downgraded Party" in the 10th and 11th lines and replacing them with the words "to perfect the security interest of the Downgraded Party".

Paragraph 6(a)(iii) is amended by deleting that subsection in its entirety and inserting the following in its place:

“(iii) Interest Payments on Cash. The Secured Party or its Custodian shall retain as additional Performance Assurance any interest or other amounts paid or deemed to have been paid with respect to Cash.”

Paragraph 6 is amended by inserting the following new subparagraph 6(d) at the end thereof:

“(d) Generally. Any principal, dividends, receipts, gains and/or interest accruing upon or paid to or received by the Secured Party and/or its Custodian in respect of non-Cash Performance Assurance held by the Secured Party and/or its Custodian for safekeeping, shall be held or retained as additional Performance Assurance subject to this Collateral Annex and shall be subject to the security interest in, general first lien on and right of set-off against, such Performance Assurance granted pursuant hereto in favor of the Secured Party.”

Amendments to Paragraph 8:

Paragraph 8(b) is amended by replacing the term “Secured Party” with “Pledging Party” at the beginning of the 2nd line.

Paragraph 8 is amended by inserting the following new subparagraph 8(c) at the end thereof:

“(c) Each quotation from a Reference Market-maker will be for an amount, if any, that would be paid to the Party requesting the quotation (expressed as a negative number) or by the Party requesting the quotation (expressed as a positive number) in consideration of an agreement between such Party (taking into account this Collateral Annex and the existence of any Guarantor with respect to the obligations of such Party) and the quoting Reference Market-maker to enter into a transaction that would have the effect of preserving for the Party requesting the quotation the economic equivalent of any payment or delivery (whether the underlying obligation was absolute or contingent and assuming the satisfaction of each applicable condition precedent) by the Parties in respect of such Transaction or group of Transactions. The costs of retaining Reference Market-makers for the purposes of this Paragraph 8 shall be borne equally by the Secured Party and the Pledging Party. The determination made by such Reference Market-makers shall be binding and conclusive on the Parties absent manifest error.”

With respect to the Collateral Threshold, Independent Amount, Minimum Transfer Amount and Rounding Amount, if no selection is made in this Cover Sheet with respect to a Party, then the applicable amount in each case for such Party shall be zero (0). In addition, with respect to the “Administration of Cash Collateral” section of this Paragraph 10, if no selection is made with respect to a Party, then such Party shall not be entitled to hold Performance Assurance in the form of Cash and such Cash, if any, shall be held in a Qualified Institution pursuant to Paragraph 6(a)(ii)(B) of the Collateral Annex. If a Party is eligible to hold Cash pursuant to a selection in this Paragraph 10 but no Interest Rate is selected, then the Interest Rate for such Party shall be the Federal Funds Effective Rate as defined in Section VI of this Paragraph 10.

IN WITNESS of this agreement the Parties have executed this Collateral Annex on the respective dates set out below with effect from the date set out above.

CAROLINA POWER & LIGHT COMPANY
D/B/A PROGRESS ENERGY CAROLINAS,
INC.

By: 

Name: Alexander (Sasha) Weintraub
Title: Vice President - Fuels and Power Optimization

Date: March 22 2012

MORGAN STANLEY CAPITAL GROUP INC.

By: 

Name: Deborah L. Hart

Title: Vice President

Date: March 20, 2012



PEC-EDF PSA

**MASTER POWER PURCHASE AND SALE AGREEMENT
CONFIRMATION LETTER**

This is a confirmation (the "Confirmation") dated March 19, 2012, between Progress Energy Carolinas, Inc. ("PEC") and EDF Trading North America, LLC ("Buyer") (individually a "Party" and collectively the "Parties"). The Parties agree as follows:

COMMERCIAL TERMS

- General:** PEC will sell and deliver, and Buyer will purchase and receive, the Quantity of Capacity and Energy every hour during the Delivery Period.
- Product:** Capacity and Firm (LD) Energy, as defined in Schedule P of the EEI Master Agreement. PEC will not use the Capacity sold hereunder to meet its planning or operational reserve requirements. The Energy will be delivered from PEC's generating resources.
- Quantity:** 100 MW On-Peak (Monday to Friday 0700-2300 EPT),
100 MW Off-Peak (Monday to Sunday 2300-0700 EPT and Saturday and Sunday 0700-2300 EPT)
- Term:** Begins the first day after the date of the closing of the Merger, but not earlier than June 1, 2012 and not later than August 1, 2012 and ends August 31, 2014. Within five Business Days after all regulatory approvals required for the closing of the Merger have been obtained, PEC will give notice to Buyer of the closing date of the Merger. The "Merger" means the merger between Progress Energy, Inc and Duke Energy Corporation which has been conditionally approved by the Federal Energy Regulatory Commission ("FERC") in FERC docket EC11-60.
- Delivery Period:** The period beginning at 0000 EPT on the first day after the date of the closing of the Merger, but not earlier than June 1, 2012 and not later than August 1, 2012, and ending at 2400 EPT on August 31, 2014.
- Payment:** Buyer shall pay to PEC the Monthly Capacity Price for the entire Delivery Period and shall pay to PEC the Energy Price for all Energy delivered hereunder.

Execution Copy

Monthly Capacity Price:

Term	ON-peak Capacity Charge \$/kw month	OFF-peak Capacity Charge \$/kw month
June 1-August 31, 2012	(1.248)	(0.429)
June 1-August 31, 2013	(1.773)	(0.548)
June 1-August 31, 2014	(1.102)	(0.155)

For the avoidance of doubt, amounts in parentheses shall be paid by PEC to Buyer. If the first day of the Term falls on any day other than the first day of a calendar month, the Monthly Capacity Payment for that month shall be prorated on a daily basis.

Energy Price:

On-Peak: the product of the On-Peak Heat Rate times the Gas Index

Off-Peak: the product of the Off-Peak Heat Rate times the Gas Index

Gas Index:

Daily Index price for natural gas in MMBtu, as reported in the Platts Publication Gas Daily, under the heading Transco Zone 5

Heat Rates:

On-Peak: 10.0 MMBtu/MWh

Off-Peak: 7.0 MMBtu/MWh

Delivery Point:

CPLE system busbar

Transmission:

Buyer shall obtain transmission service and any Ancillary Services required for transmission of the Energy from the Delivery Point.

Execution Copy

Energy Scheduling:

Buyer shall purchase and schedule the full Quantity of Energy during all hours of the Delivery Period unless excused under the terms of this Agreement. Prior to 0930 EPT of the day prior to the day of delivery of the Energy, Buyer will request transmission service sufficient to transmit the full Quantity of Energy from the Delivery Point to the ultimate sink. To the extent the ultimate sink is the PJM Interconnection and Buyer has requested and been denied PJM Spot In (or equivalent no reservation fee import service), Buyer shall request non-firm point to point import transmission service. By no later than 0930 EPT of the day prior to the day of delivery of the Energy, Buyer will provide written notice (the "0930 Notice") to DEC stating the quantity of Energy of which Buyer will take delivery and the transmission path from the Delivery Point to the ultimate sink for which Buyer obtained or attempted to obtain transmission service.

If the 0930 Notice states that Buyer will not take delivery of the full Quantity, then Buyer shall state the reason. If the 0930 Notice states that Buyer will not take delivery of the full Quantity of Energy because Buyer was unable to obtain transmission service sufficient to transmit the full Quantity from the Delivery Point to the ultimate sink, then, by no later than 1530 EPT, Buyer shall provide another written notice (the "1530 Notice") to DEC stating the additional quantity of Energy (up to the full Quantity of Energy) for which Buyer has obtained transmission service on the same path as the 0930 Notice and of which Buyer will take delivery. If the 0930 Notice and 1530 Notice, if any, state that Buyer will not take delivery of the full Quantity of Energy, then DEC shall be excused from its obligation to deliver the quantity of Energy. For the avoidance of doubt, Buyer's failure to submit requests for sufficient transmission service (firm, Spot In, and/or non-firm) or to give notice to DEC in accordance with the deadlines set forth in this provision will constitute an unexcused failure to receive; otherwise Buyer's performance

OTHER PROVISIONS

1. Conditions Precedent

(a) It is a condition precedent to the Parties' obligations hereunder that the closing of the Merger occurs by July 31, 2012.

(b) It is a condition precedent to the Parties' obligations hereunder that this Confirmation is accepted by FERC by July 31, 2012 as a PEC rate schedule under the Federal Power Act without modification, suspension, investigation or other condition (including setting this Confirmation, or part thereof, for hearing) unacceptable to PEC. PEC will give notice to the Buyer within two Business Days after this condition has been satisfied.

2. Transmission

Seller (PEC) agrees that in the event FERC in its consideration of the joint Open Access Transmission Tariff filed in Docket No. ER11-3307 in conjunction with the Merger (i) does not approve the joint OATT, (ii) approves the joint OATT but does not approve the de-pancaked transmission rate across the PEC and Duke Energy Carolinas, Inc. ("DEC") balancing authority areas; or, (iii) PEC and DEC otherwise during the Term of this Confirmation Letter do not maintain a de-pancaked transmission rate across the PEC and DEC balancing authority areas, then PEC will reimburse Buyer for the additional costs, if any, associated with a second separate rate incurred by Buyer for transmitting the Energy purchased hereunder across both the PEC and DEC balancing authority areas.

3. EEI Master Agreement

(a) The transaction described in this Confirmation constitutes a Transaction entered into under and subject to the EEI Master Power Purchase and Sale Agreement between the Parties dated March 19, 2012, as amended as follows (the "EEI Master Agreement").

Execution Copy

(b) As applied to this Confirmation only, Section 1.23 of the EEI Master Agreement is hereby amended so that it reads in its entirety as follows: "Force Majeure" means an event or circumstance which prevents one Party from performing its obligations under one or more Transactions, which event or circumstance was not anticipated as of the date the Transaction was agreed to, which is not within the reasonable control of, or the result of the negligence of, the Claiming Party, and which, by the exercise of due diligence, the Claiming Party is unable to overcome or avoid or cause to be avoided. Force Majeure shall not be based on (i) the loss of Buyer's markets; (ii) Buyer's inability economically to use or resell the Product purchased hereunder; (iii) the loss or failure of Seller's supply; or (iv) Seller's ability to sell the Product at a price greater than the Contract Price. Notwithstanding the foregoing, it shall be a Force Majeure, the performance of Buyer shall be excused, and no damages shall be payable, including any amounts determined pursuant to Article Four, if the transmission is unavailable or interrupted or curtailed for any reason, at anytime, anywhere from the Delivery Point to the Buyer's proposed ultimate sink, regardless of whether transmission, if any, that Buyer is attempting to secure and/or has purchased for the Product is firm or non-firm. If the transmission (whether firm or non-firm) that Buyer is attempting to secure is unavailable, this contingency excuses performance by the Buyer for the duration of the unavailability. If the transmission (whether firm or non-firm) that Buyer has secured from the Delivery Point to the sink is interrupted or curtailed for any reason, this contingency excuses performance by the Buyer for the duration of the interruption or curtailment. The applicability of Force Majeure to the Transaction is governed by the terms of the Product and Related Definitions contained in Schedule P.

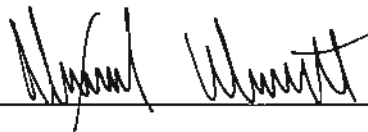
(c) As applied to this Confirmation only, Section 1.53 of the EEI Master Agreement is hereby amended so that it reads in its entirety as follows: "'Sales Price' equals zero under all circumstances."

3. Entire Agreement

This Confirmation (along with the EEI Master Agreement) constitutes the entire and integrated agreement between the Parties relating to the rates, terms, and conditions set out in this Confirmation. This Confirmation supersedes all prior agreements whether oral or written related to the subject matter of this Confirmation.

The Parties have executed this Confirmation through their duly authorized representatives on the dates set forth below.

PROGRESS ENERGY CAROLINAS, INC. **EDF TRADING NORTH AMERICA, LLC**

By: 

Name: **Alexander (Sasha) Weintraub**
Title: **Vice President - Fuels and Power Optimization**

By:  

Name: **W. Eric Dennison**
Title: **Senior Vice President**

MASTER POWER PURCHASE AND SALE AGREEMENT

COVER SHEET

This *Master Power Purchase and Sale Agreement* ("Master Agreement") is made as of the following date: March 19, 2012 ("Effective Date"). The *Master Agreement*, together with the exhibits, schedules and any written supplements hereto, the Party A Tariff, if any, the Party B Tariff, if any, any designated collateral, credit support or margin agreement or similar arrangement between the Parties and all Transactions (including any confirmations accepted in accordance with Section 2.3 hereto) shall be referred to as the "Agreement." The Parties to this *Master Agreement* are the following:

Name: **EDF Trading North America, LLC** ("Party A")

All Notices:

Street: 4700 West Sam Houston Parkway, Suite 250

City: Houston, TX Zip: 77041

Attn: Contract Administration

Phone: 281-781-0333

Facsimile: 281-653-1454

Duns: 130385763

Federal Tax ID Number: 98-0596593

Invoices:

Attn: Power Accounting

Phone: 281-653-1683

Facsimile: 281-653-1033

Confirmations:

Attn: Confirmation Department

Phone: 281-653-1683

Facsimile: 281-653-1033

Scheduling:

Attn: Power Scheduling

Phone: 281-781-0333

Facsimile: 281-781-0360

Payments:

Attn: Power Accounting

Phone: 281-653-1683

Facsimile: 281-653-1033

Wire Transfer:

BNK: Wells Fargo Bank, N.A.

ABA: 121000248

ACCT: 4121947964

Credit and Collections:

Attn: Credit Manager

Phone: 281.781.0333

Facsimile: 281.781.0360

Name : **Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.** ("Counterparty" or "Party B")

All Notices: P. O. Box 1551

Street: 410 South Wilmington Street

City: Raleigh, NC Zip: 27601

Attn: General Counsel

Phone: 919-546-7501

Facsimile: 919-546-3805

Duns: 00-699-7217

Federal Tax ID Number: 56-0165465

Invoices:

Attn: Fuels & Power Optimization

Phone: 919-546-7518

Facsimile: 919-546-3258

Confirmations:

Attn: Confirmations

Phone: 919-546-6168

Facsimile: 919-546-3258

Scheduling:

Attn: Hourly Desk

Phone: 919-546-6639

Facsimile: 919-546-3374

Payments:

Attn: Fuels & Power Optimization

Phone: 919-546-7518

Facsimile: 919-546-3258

Wire Transfer:

BNK: Wachovia Bank, N. A.

ABA: 053000219

ACCT: 2062660000020

Credit and Collections:

Attn: Risk Management

Phone: 919-546-5161

Facsimile: 919-546-7826

With additional Notices of an Event of Default or
Potential Event of Default to:
EDF Trading North America, LLC
4700 W. Sam Houston Pkwy., Suite 250
Houston, TX 77041
Attn: General Counsel
Fax: 281-653-1454

With additional Notices of an Event of Default or
Potential Event of Default to:
Florida Power Corporation d/b/a Progress Energy
Florida, Inc.
Attn: Vice President-Fuels and Power Optimization
Phone: 919.546.6299
Facsimile: 919.546.4640

The Parties hereby agree that the General Terms and Conditions are incorporated herein, and to the following provisions as provided for in the General Terms and Conditions:

Party A Tariff Tariff: FERC Rate Schedule Dated: September 22, 2010 Docket Number: ER10-2794

Party B Tariff Tariff: _____ Dated: _____ Docket Number: _____

Article Two

Transaction Terms and Conditions ☒ Optional provision in Section 2.4. If not checked, inapplicable.

Article Four

Remedies for Failure to Deliver or Receive ☒ Accelerated Payment of Damages. If not checked, inapplicable.

Article Five

Events of Default; Remedies

☒ Cross Default for Party A:

☐ Party A: EDF Trading North America, LLC

Cross Default Amount:
\$50,000,000

☐ Other Entity

Cross Default Amount

☒ Cross Default for Party B:

☒ Party B: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.

Cross Default Amount
\$50,000,000

☐ Other Entity:

Cross Default Amount

5.6 Closeout Setoff

☒ Option A (Applicable if no other selection is made.)

☐ Option B -

☐ Option C (No Setoff)

Article 8

Credit and Collateral Requirements

8.1 Party A Credit Protection:

(a) Financial Information:

☒ Option A

☐ Option B Specify:

☐ Option C

(b) Credit Assurances:

☐ Not Applicable

☒ Applicable

(c) Collateral Threshold:

☒ Not Applicable

☐ Applicable

If applicable, complete the following:

Party B Collateral Threshold: Not applicable

(d) Downgrade Event:

☐ Not Applicable

☒ Applicable

If applicable, complete the following:

☐

☒ Other:

Specify: If there is a material adverse change to the creditworthiness of either party, then the other party has the right to request Performance Assurance

(e) Guarantor for Party B: Not applicable

8.2 Party B Credit Protection:

(a) Financial Information:

☐ Option A

☐ Option B Specify:

☒ Option C Specify: (1) Financial information required in Option B for Party A's Guarantor; (2) copies of all corporate authorizations and any other documents with respect to the execution, delivery and performance of this Agreement; (3) certificate of authority and specimen signatures of individuals executing this Agreement, any Confirmation and each Transaction and (4) Uniform Sales & Use Tax Certificate – Multijurisdiction or other similar applicable resale certificates.

(b) Credit Assurances:

☐ Not Applicable

☒ Applicable

(c) Collateral Threshold:

☒ Not Applicable

☐ Applicable

If applicable, complete the following:

Party A Collateral Threshold: Not applicable

(d) Downgrade Event:

☐ Not Applicable

☒ Applicable

If applicable, complete the following:

☐

☒ Other:

Specify: If there is a material adverse change to the creditworthiness of either party, then the other party has the right to request Performance Assurance

(e) Guarantor for Party A: Not applicable

Article 10

Confidentiality

☒ Confidentiality Applicable

If not checked, inapplicable.

Schedule M

☐ Party A is a Governmental Entity or Public Power System

☐ Party B is a Governmental Entity or Public Power System

☐ Add Section 3.6. If not checked, inapplicable

☐ Add Section 8.6. If not checked, inapplicable

Other Changes

Specify, if any: The Parties agree to the following revisions:

This Master Power Purchase and Sale Agreement shall solely govern the sale and purchase between Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. and EDF Trading North America, LLC as detailed in the attached Transaction Confirmation dated March 19, 2012. The Parties agree that upon completion of Parties' obligations pursuant to that Transaction, this Master Power Purchase and Sale Agreement shall terminate.

Section 1.8: In line 2, replace "that directly or indirectly" with "to the extent they"

Section 1.12 – "Credit Rating" is amended by changing the word "issues" to "issuer". Additionally, add the following as a new last sentence at the end of the section: "In the event of an inconsistency in ratings assigned by S&P and Moody's (a "split rating"), the lowest rating assigned shall control."

Sections 1.24 and 1.28: Add the following as a new last sentence: "Each present value calculation shall be made using as a discount rate the rate of interest that is published from time to time under "Money Rates" by The Wall Street Journal for large U.S. Money Center commercial banks for the then effective London Interbank Offered Rate ("LIBOR") that most closely corresponds to the remaining term of the transaction."

Section 1.27: Delete the word "transferable" in the first line and replace it with the word "non-transferable".

Section 1.50 – “Recording” is amended by replacing the reference to “Section 2.4” with a reference to “Section 2.5”.

Section 1.51 – “Replacement Price” is amended by deleting the phrase “at Buyer’s option” from the fifth line and replace it with the phrase “absent a purchase”.

Section 1.53 – “Sales Price” is amended by deleting the phrase “at Seller’s option” from the fifth line and replace it with the phrase “absent a sale”.

Article One is further amended by adding the following new Section 1.62:

“1.62 “Specified Transaction” means any contract or transaction, including an agreement with respect thereto (whether or not documented under or effected pursuant to a master agreement), now existing or hereafter entered into between one Party and the other Party that includes, without limitation, a rate swap, basis swap, forward rate transaction, commodity swap, commodity option, a purchase or sale of a commodity, equity or equity index swap, equity or equity index option, bond option, interest rate option, foreign exchange transaction, cap transaction, floor transaction, collar transaction, currency swap transactions, cross-currency rate swap transaction, currency option or any other similar transaction (including any option with respect to any of these transactions or any combination of these transactions) or any other transaction identified as a Specified Transaction in this Agreement or the relevant Confirmation. For purposes hereof, a “commodity” has the meaning set forth in the Commodity Exchange Act (7 U.S.C. §1(a)(4)).”.

Add the following Section 1.63:

“Credit Event Upon Merger” means a party (X) consolidates or amalgamates with or merges with or into, or transfers all or substantially all of its assets to another entity and the creditworthiness of the resulting, surviving or transferee entity is materially weaker than that of X immediately prior to such action.

Section 2.4: Delete the words “either orally or” from line 7.

Section 3.3: In line 7, add the phrase “use commercially reasonable efforts to” before the word “remedy” and, additionally, after the word “remedy” insert “(provided that the Claiming Party shall not be required to suffer prejudice or use commercially unreasonable measures to remedy a Force Majeure event)”.

Section 5.1 is hereby amended by:

- (i) by deleting the phrase “three (3) Business Days” and inserting in its place the phrase “two (2) Business Days” in the second line of Section 5.1(a);
- (ii) by deleting in Section 5.1(h)(ii) the words “three (3) Business Days” and inserting in its place the words “two (2) Business Days.”
- (iii) in Section 5.1(g): Amend to add the following language to the end of the section: “provided, however, an Event of Default shall not occur under this Section 5.1(g) if, as demonstrated to the reasonable satisfaction of the other Party, (a) the event of default, default, similar other condition, or the failure to pay under subsection (i) or (ii) above is the result of a failure to pay caused solely by error or omission of an administrative or operational nature and funds were available to enable the Party to make the payment when due; and (b) the payment is made within three (3) Business Days of such Party’s receipt of written notice of its failure to pay;”.
- (iv) by adding the following as a new subsection 5.1(i)
 - “(i) such Party defaults (howsoever defined) or fails to make any payment under a Specified Transaction and, after giving effect to any applicable grace period or notice requirement therein, there occurs an early termination, liquidation, or close-out of the Specified Transaction; *provided, however*, that such default or failure to pay continues for at least

three (3) Business Days if there is no applicable grace period or notice requirement under the relevant Specified Transaction;”;

- (iv) by adding the following as 5.1(j)
“such Party is subject to a Credit Event Upon Merger,”

Section 5.2, Declaration of an Early Termination Date and Calculation of Settlement Amounts, is amended by reversing the placement of “(i)” and “to”.

Section 5.3 – Net Out of Settlement Amounts is amended by inserting the phrase “plus, at the option of the Non-Defaulting Party, any cash or other form of security then available to or in the possession of the Defaulting Party pursuant to Article Eight,” between the phrase “Non-Defaulting Party,” and “plus any or all other amounts” in the sixth line thereof.

Section 5.4: Add the following as a new last sentence of the section: “Notwithstanding any provision to the contrary contained in this Agreement, however, the Non-Defaulting Party shall not be required to pay the Defaulting Party any amount under this Article 5 unless and until the Non-Defaulting Party receives confirmation satisfactory to it in its reasonable discretion that all other obligations of any kind whatsoever of the Defaulting Party to make any payments to the Non-Defaulting Party under this Agreement or otherwise which are due and payable as of the Early Termination Date have been fully and finally performed.”

Section 8.1(b) is amended by:

- a) replacing the “three (3) Business Days” in the fifth and seventh lines with “two (2) Business Days”; and
- b) inserting the following at the end thereof:

“In addition, if Party B fails to provide Performance Assurance within two (2) Business Days of receipt of notice, Party A may also withhold or suspend its payment obligations under this Agreement and under any Transaction until it receives the Performance Assurance. Further, reasonable grounds to believe that Party B’s creditworthiness or performance under this Agreement has become unsatisfactory” may include, but are not limited to: (a) knowledge that Party B is defaulting under other material contracts or transactions (including but not limited to contracts or transactions with third parties), or (b) any material adverse change in Party B.”

Section 8.2(b) is amended by:

- a) replacing the “three (3) Business Days” in the fifth and seventh lines with “two (2) Business Days”; and
- b) inserting the following at the end thereof:

“In addition, if Party A fails to provide Performance Assurance within two (2) Business Days of receipt of notice, Party B may also withhold or suspend its payment obligations under this Agreement and under any Transaction until it receives the Performance Assurance. Further, reasonable grounds to believe that Party A’s creditworthiness or performance under this Agreement has become unsatisfactory” may include, but are not limited to: (a) knowledge that Party A is defaulting under other material contracts or transactions (including but not limited to contracts or transactions with third parties), or (b) any material adverse change in Party A.”

Sections 8.1(d) and 8.2(d) are amended as follows: After the comma in line five of each of these sections, add the following “or shall fail to maintain such Performance Assurance or guaranty or other credit assurance for so long as the Downgrade Event is continuing.”

Section 10.2 – Representations and Warranties is hereby amended by adding the following new subsection at the end thereof:

(xiii) it is an “Eligible Contract Participant” as defined in Section 1a(12) of the Commodity Exchange Act, as amended by the Commodity Futures Modernization Act of 2000 (the “Commodity Exchange Act”); an “Eligible Commercial Entity” as defined in section 1a(11) of the Commodity Exchange Act; and each transaction that is not executed or traded on a “trading facility”, as defined in Section 1(a)(34) of the Commodity Exchange Act, as amended, is subject to individual negotiation by the parties.

Section 10.2(viii) is hereby amended by adding at the end thereof: “; it is further understood that information and explanations of the terms and conditions of each such Transaction shall not be considered investment or trading advice or a recommendation to enter into that Transaction and the other party is not acting as a fiduciary for or an adviser to it in respect of that Transaction;”

Section 10.4 – Indemnity is amended to add the phrase “unless such a Claim is ultimately determined to be due to such Party’s gross negligence, willful misconduct or bad faith, in which case the other party shall not be responsible for any indemnification” at the end of the first sentence of Section 10.4.

Section 10.5 – Assignment is hereby amended by deleting the phrase “which consent may be withheld in the exercise of its sole discretion” in the second line and replacing it with “which consent shall not be unreasonably withheld.” and deleting the remainder of that section.

Section 10.9 is amended by inserting the phrase “copies of” in the second line between the phrase “to examine” and the phrase “the records”.

Section 10.10: Add the following as a new last sentence at the end of the section: “The Parties further acknowledge and agree that: (i) all payments made or to be made by one Party to the other Party under this Agreement with respect to forward contracts constitute “settlement payments” and/or “margin payments” within the meaning of the Bankruptcy Code; (ii) all transfers of Performance Assurance by one Party to the other Party under this Agreement constitute “margin payments” within the meaning of the Bankruptcy Code; (iii) without limitation, each Party’s rights under Sections 5.2, 5.3, 5.6, 5.7 and 8.3 of this Agreement constitute a contractual rights “to liquidate, terminate, accelerate, or offset” the Transactions within the meaning of the Bankruptcy Code; and (iv) this Agreement constitutes a “master netting agreement” and each Party is a “master netting agreement participant” within the meaning of the Bankruptcy Code.”

Section 10.11: The following is added an additional sentence at the end of Section 10.11: A Party may disclose any one or more of the commercial terms of a Transaction (other than the name of the other Party unless otherwise agreed to in writing by the Parties) to any industry price source for the purpose of aggregating and reporting such information in the form of a published energy price index.

“10.13 Add the following as the new Section 10.12: FERC Standard of Review; Mobile-Sierra Waiver.

(a) Absent the agreement of all Parties to the proposed change, the standard of review for changes to any rate, charge, classification, term or condition of this Agreement, whether proposed by a Party (to the extent that any waiver in subsection (b) below is unenforceable or ineffective as to such Party), a non-party or FERC acting sua sponte, shall solely be the “public interest” application of the “just and reasonable” standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956) and clarified by *Morgan Stanley Capital Group, Inc. v. Public Util. Dist. No. 1 of Snohomish* 554 U.S. ___ (2008) (the “Mobile-Sierra” doctrine).

(b) In addition, and notwithstanding the foregoing subsection (a), to the fullest extent permitted by applicable law, each Party, for itself and its successors and assigns, hereby expressly and irrevocably waives any rights it can or may have, now or in the future, whether under §§ 205 and/or 206 of the Federal Power Act or otherwise, to seek to obtain from FERC by any means, directly or indirectly (through complaint, investigation or otherwise), and each hereby covenants and agrees not at any time to seek to so

obtain, an order from FERC changing any section of this Agreement specifying the rate, charge, classification, or other term or condition agreed to by the Parties, it being the express intent of the Parties that, to the fullest extent permitted by applicable law, neither Party shall unilaterally seek to obtain from FERC any relief changing the rate, charge, classification, or other term or condition of this Agreement, notwithstanding any subsequent changes in applicable law or market conditions that may occur. In the event it were to be determined that applicable law precludes the Parties from waiving their rights to seek changes from FERC to their market-based power sales contracts (including entering into covenants not to do so) then this subsection (b) shall not apply, provided that, consistent with the foregoing subsection (a), neither Party shall seek any such changes except solely under the "public interest" application of the "just and reasonable" standard of review and otherwise as set forth in the foregoing section (a).

Add the following as the new Section 10.13: Index Transactions.

If the Contract Price for a Transaction is determined by reference to a Price Source, then:

Market Disruption. If a Market Disruption Event occurs on any one or more days during a Determination Period (each day, a "Disrupted Day"), then:

- The fallback Floating Price, if any, specified by the Parties in the relevant Confirmation shall be the Floating Price for each Disrupted Day.
- If the Parties have not specified a fallback Floating Price, then the Parties will endeavor, in good faith and using commercially reasonable efforts, to agree on a substitute Floating Price, taking into consideration, without limitation, guidance, protocols or other recommendations or conventions issued or employed by trade organizations or industry groups in response to the Market Disruption Event and other prices published by the Price Source or alternative price sources with respect to the Delivery Point or comparable Delivery Points that may permit the Parties to derive the Floating Price based on historical differentials.
- If the Price Source retrospectively issues a Floating Price in respect of a Disrupted Day (a "Delayed Floating Price") before the parties agree on a substitute Floating Price for such day, then the Delayed Floating Price shall be the Floating Price for such Disrupted Day. If a Delayed Price is issued by the Price Source in respect of a Disrupted Day after the Parties agree on a substitute Floating Price for such day, the substitute Floating Price agreed upon by the Parties will remain the Floating Price without adjustment unless the Parties expressly agree otherwise.
- If the Parties cannot agree on a substitute Floating Price and the Price Source does not retrospectively publish or announce a Floating Price, in each case, on or before the fifth Business Day following the first Trading Day on which the Market Disruption Event first occurred or existed, then the Floating Price for each Disrupted Day shall be determined by taking the arithmetic mean of quotations requested from four leading dealers in the relevant market that are unaffiliated with either Party and mutually agreed upon by the Parties ("Specified Dealers"), without regard to the quotations with the highest and lowest values, subject to the following qualifications:
 - If exactly three quotations are obtained, the Floating Price for each such Disrupted Day will be the quotation that remains after disregarding the quotations having the highest and lowest values.
 - If fewer than three quotations are obtained, the Floating Price for each such Disrupted Day will be the average of the quotations obtained.
 - If the Parties cannot agree upon four Specified Dealers, then each of the Parties will, acting in good faith and in a commercially reasonable manner, select up to two Specified Dealers separately, and those selected dealers shall be the Specified Dealers.
- Unless otherwise agreed, if at any time the Parties agree on a substitute Floating Price for any Disrupted Day, then such substitute Floating Price shall be the Floating Price for such Disrupted Day, notwithstanding the subsequent publication or announcement of a Delayed Floating Price by the relevant Price Source or any quotations obtained from Specified Dealers.

"Determination Period" means each calendar month a part or all of which is within the Delivery Period of a Transaction.

"Exchange" means, in respect of a Transaction, the exchange or principal trading market specified as applicable to the relevant Transaction.

"Floating Price" means a Contract Price specified in a Transaction that is based upon a Price Source.

"Market Disruption Event" means, with respect to any Price Source, any of the following events:

- (a) the failure of the Price Source to announce, publish or make available the specified Floating Price or information necessary for determining the Floating Price for a particular day;
- (b) the failure of trading to commence on a particular day or the permanent discontinuation or material suspension of trading in the relevant options contract or commodity on the Exchange, RTO or in the market specified for determining a Floating Price;

(c) the temporary or permanent discontinuance or unavailability of the Price Source;

(d) the temporary or permanent closing of any Exchange or RTO specified for determining a Floating Price; or

(e) a material change in the formula for or the method of determining the Floating Price by the Price Source or a material change in the composition of the Product.

"Price Source" means, in respect of a Transaction, a publication or such other origin of reference, including an Exchange or RTO, containing or reporting or making generally available to market participants (including by electronic means) a price, or prices or information from which a price is determined, as specified in the relevant Transaction.

"RTO" means any regional transmission operator or independent system operator.

"RTO Transaction" means a Transaction in which the Price Source is an RTO.

"Trading Day" means a day in respect of which the relevant Price Source ordinarily would announce, publish or make available the Floating Price.

Corrections to Published Prices. If the Floating Price published, announced or made available on a given day and used or to be used to determine a relevant price is subsequently corrected by the relevant Price Source (i) within 30 days of the original publication, announcement or availability, or (ii) in the case of RTO Transactions only, within such longer time period as is consistent with the RTO's procedures and guidelines, then either Party may notify the other Party of that correction and the amount (if any) that is payable as a result of that correction. If, not later than thirty (30) days after publication or announcement of that correction, a Party gives notice that an amount is so payable, the Party that originally either received or retained such amount will, not later than three (3) Business Days after such notice is effective, pay, subject to any applicable conditions precedent, to the other Party that amount, together with interest at the Interest Rate for the period from and including the day on which payment originally was (or was not) made to but excluding the day of payment of the refund or payment resulting from that correction. Notwithstanding the foregoing, corrections shall not be made to any Floating Prices agreed upon by the Parties or determined based on quotations from Specified Dealers pursuant to paragraph (a) above unless the Parties expressly agree otherwise.

Rounding. When calculating a Floating Price, all numbers shall be rounded to four (4) decimal places. If the fifth (5th) decimal number is five (5) or greater, then the fourth (4th) decimal number shall be increased by one (1), and if the fifth (5th) decimal number is less than five (5), then the fourth (4th) decimal number shall remain unchanged.

IN WITNESS WHEREOF, the Parties have caused this Master Agreement to be duly executed as of the date first above written.


EDF TRADING NORTH AMERICA, LLC

By: 

Name: W. Eric Dennison

Title: Senior Vice President

CAROLINA POWER & LIGHT COMPANY d/b/a
PROGRESS ENERGY COMPANY, INC.

By: 

Name: Alexander (Sasha) Weintraub
Vice President - Fuels and Power Optimization

Title: _____

DISCLAIMER: This Master Power Purchase and Sale Agreement was prepared by a committee of representatives of Edison Electric Institute ("EEI") and National Energy Marketers Association ("NEM") member companies to facilitate orderly trading in and development of wholesale power markets. Neither EEI nor NEM nor any member company nor any of their agents, representatives or attorneys shall be responsible for its use, or any damages resulting therefrom. By providing this Agreement EEI and NEM do not offer legal advice and all users are urged to consult their own legal counsel to ensure that their commercial objectives will be achieved and their legal interests are adequately protected.

LEGAL AL

CREDIT JA

SETTLEMENTS RS

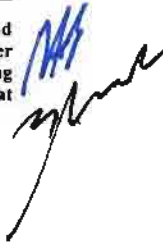


EXHIBIT D

**EXECUTED CONTRACT WITH POTOMAC ECONOMICS
TO PERFORM COMPLIANCE MONITORING**

March 23, 2012

Dr. David B. Patton, President
Potomac Economics, Ltd.
4029 Ridge Top Road
Fairfax, VA 22030

**Re: DUKE ENERGY CAROLINAS, LLC
PROGRESS ENERGY CAROLINAS, INC.
MERGER MITIGATION PLAN
COMPLIANCE MONITORING RETENTION AGREEMENT**

Dear Dr. Patton:

The purpose of this letter agreement ("Retention Agreement") is to confirm the terms by which Duke Energy Carolinas, LLC ("DEC") and Progress Energy Carolinas, Inc. ("PEC") retain Potomac Economics, Ltd. ("Potomac") for monitoring the compliance by DEC/PEC with certain aspects, described below, of the "Revised Mitigation Proposal" which Duke Energy Corporation ("Duke") and Progress Energy, Inc. ("Progress") expect to file with the Federal Energy Regulatory Commission ("FERC") on or about March 26, 2012, in Docket No. EC11-60-001 (the "Proposal"). DEC, PEC and Potomac may be referred to herein individually as a "Party" and collectively as the "Parties."

1. **Scope of Services**

- A. Upon the occurrence of: (1) approval of the Proposal by the FERC without condition or modification, or with conditions or modifications that are acceptable to each of the Parties; (2) the closing of the merger between Duke and Progress; and (3) in the case of the transmission set aside (if required by FERC), completion of the transmission projects described in the Revised Mitigation Proposal, Potomac will provide independent and impartial verification, monitoring, analysis and reporting on the compliance by DEC/PEC with certain aspects of the Proposal ("Compliance Monitoring"), as detailed herein.
- B. Said Compliance Monitoring shall consist of three tasks, set forth below, which apply to compliance with the following two aspects of the Proposal: (1) the maintenance by PEC/DEC of the executed Power Sales Agreements listed in Attachment A hereto ("PSAs") or substitute agreements which are materially the same as those PSAs ("Substitute PSA") submitted as part of the Proposal, during the period prior to the completion of the transmission projects which comprise the permanent mitigation under the Proposal; and (2) to the extent that the "transmission set-aside," described in the Proposal, is required by FERC, Applicants' compliance with the transmission set-aside requirements as described more fully in the Proposal and herein.

C. The three tasks to be performed by Potomac are:

- (1) From the date of the closing of the merger until the date that the transmission projects set forth in the Proposal are placed in service, Potomac shall monitor whether the PSAs remain in effect. Within 30 days following the conclusion of each winter and summer season (the winter season being defined as December, January and February, and the summer season being defined as June, July and August), prepare and provide to DEC/PEC and file with the FERC in Docket No. EC11-60-001, a report stating whether or not DEC/PEC have maintained in the preceding season the executed PSAs listed in Attachment A hereto, and, to the extent there may have been incidents of alleged non-compliance, a description and analysis of such incidents. To the extent that Potomac determines, pursuant to Section 1.C(2), that DEC/PEC have entered into a Substitute PSA, Potomac shall note such termination and the Substitute PSA in its report, but termination of the PSA shall not be reported as an event of noncompliance.
- (2) Should any of the PSAs listed in Attachment A be terminated by any of their parties or otherwise expire before the transmission expansion projects set forth in the Proposal are completed, Potomac shall determine whether or not DEC/PEC have extended such PSAs or promptly entered into a Substitute PSA under the following time frames:
 - a. For DEC prior to February 28, 2015.
 - i. If DEC's PSA terminates during the summer or winter periods, Potomac shall determine whether DEC has entered into a Substitute PSA that is effective immediately upon the effective date of the termination of the PSA.
 - ii. If DEC's PSA terminates at any other time prior to February 28, 2015, Potomac shall determine whether DEC has entered into a Substitute PSA that will become effective in the summer or winter period following the termination.
 - b. If the original DEC PSA or a Substitute PSA expires by its own terms on February 28, 2015, Potomac shall determine whether DEC has extended such PSA or entered into a Substitute PSA with an effective date commencing June 1, 2015, but only to the extent that the transmission projects constituting permanent mitigation have not been placed in service by June 1, 2015. Potomac's monitoring of such agreement from that point on shall be consistent with the provisions of Section 1.C(2)a., until such time that the transmission projects are placed in service.
 - c. For PEC prior to August 31, 2014.
 - i. If any of PEC's PSAs terminates during the summer period, Potomac shall determine whether PEC has entered into a Substitute PSA that is effective immediately upon the effective date of the termination of the PSA.
 - ii. If any of PEC's PSAs terminates at any other time prior to August 31, 2014, Potomac shall determine whether DEC has entered

into a Substitute PSA that will become effective in the summer period following the termination.

- d. If the original PEC PSAs or Substitute PSAs expire by their own terms on August 31, 2014, Potomac shall determine whether PEC has extended such PSA or entered into a Substitute PSA with an effective date commencing June 1, 2015, but only to the extent that the transmission projects constituting permanent mitigation have not been placed in service by June 1, 2015. Potomac's monitoring of such agreement from that point on shall be consistent with the provisions of Section 1.C(2)c., until such time that the transmission projects are placed in service.

Potomac shall, within 30 days of any failure by DEC or PEC to extend the original PSAs or enter into Substitute PSAs in accordance with the above time frames, file with the FERC in Docket No. EC11-60-001, a report of the alleged non-compliance, including a description and analysis of such incidents.

- (3) To the extent FERC so requires, after all of the transmission expansion projects described in the Proposal are completed, Potomac shall monitor and determine whether DEC/PEC have maintained, during the Summer Off-Peak period only, a set aside of 25 MW of import capacity on the DEC to PEC East interface that will not be subject to firm reservations by DEC/PEC or their affiliates, by complying with the restrictions on firm transmission reservations on said path described in Attachment A hereto. Said "transmission set aside" is more fully described in Attachment A hereto. Within 30 days of the end of each summer season, Potomac shall file with the FERC in Docket No. EC11-60-001, a report stating whether or not DEC/PEC have complied with this obligation, and to the extent there may have been incidents of alleged non-compliance, a description and analysis of such incidents. DEC and PEC shall provide to Potomac all summer off-peak firm transmission reservations made by DEC/PEC on the DEC to PEC-East path.

- D. In addition to the periodic reports set forth above, to the extent that Potomac believes at any time that DEC/PEC are not in compliance with any of their obligations then being monitored pursuant to this Agreement, Potomac will immediately inform DEC/PEC. If, after discussing the circumstances with DEC/PEC, Potomac still believes that they are not in compliance with their obligations, Potomac will promptly make a filing with the FERC in Docket No. EC11-60-001 describing the alleged non-compliance and surrounding circumstances.
- E. Potomac shall simultaneously provide copies of any such reports or filings made pursuant to Paragraphs 1.C.(1) (2) and (3) above to the North Carolina Utilities Commission ("NCUC") and the Public Service Commission of South Carolina ("PSCSC").
- F. In the course of preparing the reports set forth above, Potomac will take into consideration actual system conditions at any given time as well as the information reasonably available to the relevant DEC/PEC employees at that time.

- G. All confidential or proprietary information of the Applicants will be treated as confidential by Potomac Economics, which will take steps to protect its confidentiality. To the extent that the filings or reports prepared by Potomac pursuant to this Retention Agreement may contain any proprietary, confidential or non-public data of DEC/PEC or third parties, Potomac shall prepare both confidential (non-redacted) and public (redacted) versions of said reports and shall file both with the FERC and the State Commissions, and shall request confidential treatment by those agencies of the confidential (non-redacted) versions.

2. **Rights and Responsibilities of DEC/PEC**

- A. In addition to the information specified herein, DEC /PEC will provide Potomac with all information reasonably requested by Potomac to perform its monitoring functions.
- B. DEC/PEC shall supply Potomac with copies of each executed PSA no later than the merger closing date, and shall supply Potomac with copies of any extended or substitute PSAs within 48 hours after their execution.
- C. DEC/PEC shall have the right to make responsive filings to any of the filings made by Potomac hereunder.

3. **Term and Termination**

- A. The term of this Retention Agreement shall begin on the date that the merger closes and shall run until the date which is 90 days after the last date that DEC/PEC have mitigation obligations which require Compliance Monitoring pursuant to the Proposal.
- B. Notwithstanding the foregoing provision, DEC/PEC may terminate this Retention Agreement at any time during its term immediately upon written notice in the event of material breach by Potomac.
- C. Any provisions that, by their nature, would survive termination of this Retention Agreement, including, without limitation, provisions relating to a Party's obligation to (i) make payments for any amounts owed to the other Party and (ii) treat the other Party's data and processes as confidential, shall survive termination of this Retention Agreement.

4. **Fees and Expenses**

Work performed by Potomac shall be billed at the rates set forth in Attachment B hereto.

5. **Miscellaneous Provisions**

- A. Potomac shall coordinate directly with one or more Monitoring Liaisons to be designated by DEC/PEC. DEC/PEC shall each appoint a Monitoring Liaison no later than the

merger close date. DEC/PEC shall have the right to designate substitute or replacement Monitoring Liaisons upon providing prior written notice to Potomac.

- B. Potomac represents that no principals or employees of Potomac have any present engagements or other relationships that present a conflict of interest or other impediment that would preclude Potomac from serving as the Monitor in accordance with the terms of the Plan. Potomac will not enter into an engagement or other relationship that might create such a conflict of interest or other such impediment, without the express written consent of DEC/PEC.
- C. This Retention Agreement, and the rights and obligations of the Parties, shall be governed by the laws of the State of North Carolina, and any dispute relating to this Retention Agreement, unless instituted at FERC, shall be instituted in the courts of the State of North Carolina or of the United States in the State of North Carolina, and each Party irrevocably submits, for itself and its property, to the exclusive jurisdiction of the State of North Carolina or of the United States in the State of North Carolina.
- D. This Retention Agreement is made solely for the benefit of the Parties and their successors, and no other person shall have any rights, interest or claims hereunder or otherwise be entitled to any benefits under or on account of this Retention Agreement as third party beneficiaries or otherwise.
- E. This Retention Agreement sets forth the entire agreement between the Parties with respect to the subject matter hereof. This Retention Agreement supersedes all prior agreements, whether oral or written, related to the subject matter of this Retention Agreement.
- F. Any amendment to this Retention Agreement shall be effective only if made in writing and signed by the Parties. This Retention Agreement shall not be assigned to any third party absent the written consent of all Parties.
- G. This Retention Agreement may be executed by the Parties in multiple counterparts and shall be effective as of the date set forth above when each Party shall have executed and delivered a counterpart hereof, whether or not the same counterpart is executed and delivered by each Party. When so executed and delivered, each such counterpart shall be deemed an original and all such counterparts shall be deemed one and the same document. Transmission of images of signed signature pages by facsimile, e-mail or other electronic means shall have the same effect as the delivery of manually signed documents in person.

Please confirm your acceptance of this Retention Agreement on behalf of yourself and Potomac by executing and dating this letter and returning to us.


We look forward to working with you.


Dr. David B. Patton, President
March 23, 2012
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Sincerely yours,

DUKE ENERGY CAROLINAS, LLC

PROGRESS ENERGY CAROLINAS, INC.

By: 
Brett C. Carter, President
President
Duke Energy Carolinas, LLC

By: 
Lloyd M. Yates
President
Progress Energy Carolinas, Inc.

Date: 3/23/12

Date: 3/23/2012

Agreed to and accepted:

POTOMAC ECONOMICS LTD.

By: 
Dr. David B. Patton
President
Potomac Economics Ltd.

Date: 3/23/12

ATTACHMENT A

Description of Initial Executed Power Sales Agreements

Pursuant to all initial executed PSAs, the product to be purchased and sold is capacity and firm (LD) energy on a 24 x 7 must take basis. The Summer is defined as June 1 – August 31 and the Winter is defined as December 1 – February 28. Peak is Monday – Friday, 0700 – 2300, and Off-Peak is all other hours.

DEC (1 PSA)

Buyer is Cargill Power Markets, LLC

- 150 MWs summer peak
- 300 MWs summer off-peak
- 25 MWs winter peak
- 225 MWs winter off-peak

Term: Merger closing date through February 28, 2015.

PEC (3 PSAs)

Total quantity for all three PSAs is 325 MW peak and 500 MW off-peak (summer only).

Buyers are:

- EDF Trading North America, LLC -- 100 MWs peak and 100 MWs off-peak summer only
- Morgan Stanley Capital Group, Inc. -- 125 MWs peak and 300 MWs off-peak summer only.
- Cargill Power Markets, LLC -- 100 MWs peak and 100 MWs off-peak summer only.

Term: Merger closing date through August 31, 2014.

Description of Transmission Set Aside

If FERC so requires, after all of the transmission expansion projects described in the Proposal are completed, then DEC/PEC will set aside 25 MW of import capacity on the DEC to PEC East interface that will not be subject to firm reservations by DEC/PEC or their affiliates during the Summer Off-Peak period. Specifically, the Applicants propose that, after the

transmission expansion projects are completed, they will set aside 25 MW of import capacity on the DEC to PEC East interface by complying with the following restrictions at all times during the Summer Off-Peak period:

1. If new third party firm transmission reservations¹ are greater than or equal to the 25 MW set-aside amount, then the Applicants may reserve on a firm basis up to the posted available firm transmission capacity.
2. If new third party firm transmission reservations are less than the 25 MW set-aside amount, then the Applicants shall not reserve on a firm basis any more than the amount of transmission capacity then posted as available on that path for that time which exceeds: (a) 25 MW; less (b) the sum of all new firm third party transmission reservations.

¹ References to new third party firm transmission reservations in this paragraph do not include the amount of existing third party firm reservations that have been made by third parties and that already have been allocated to third parties under the Competitive Analysis Screen.

ATTACHMENT B

OMITTED